

OVERSEAS CAPITAL RAISING OF PRC STATE-OWNED ENTERPRISES

- CASE STUDIES AND STRATEGIC RECOMMENDATIONS

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Abstract

39 PRC State-owned enterprises (“SOEs”) has raised HK\$61.49m (up to December 31, 1997) through listing H-shares in the Stock Exchange of Hong Kong. Yizheng Chemical and Harbin Power Equipment were the ‘best’ and ‘worst’ performance companies respectively in terms of the 250 trading days share price performance after IPO listing relative to Hang Seng Index.

Five main areas, which may affect share price performance, are examined through case studies of both companies. They are agency costs, government control, asymmetric information, industry and strategy. As a result, four factors are discovered to create the difference in the share price performance between Yizheng Chemical and Harbin Power Equipment: incentive system – ownership structure, analyst coverage, industry and strategy. H share companies are recommended to upgrade incentive system of directors, enhance investors’ relations and diversify business structure to reduce industry risk.

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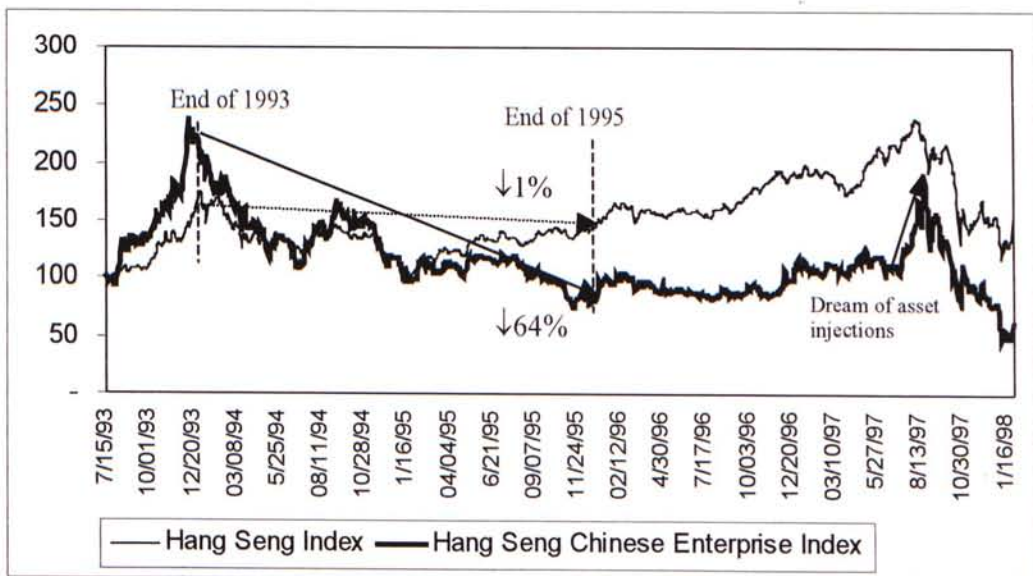
CHAPTER I

INTRODUCTION

I.1. Why do we study H-share companies?

From the 1st H-share company listing, Tsingtao Brewery, in 1993 to the end of 1997, 39 H-share companies had already listed in the Stock Exchange of Hong Kong, and had raised about HK\$61.49 billion¹, through public offerings in Hong Kong, and international offerings and placing (See Appendix I).

Figure 1– Hang Seng Index vs. Hang Seng Chinese Enterprise Value (15/7/93 to 2/2/98)
(Base Value of both indexes at July 15, 93 were equal to 100.)



Source: Datastream

At the beginning, listing of H-share companies created a dream for investors to share the growth of economy of the PRC. Investors were 'infected' by the H-share fever to subscribe their shares. The public offerings in Hong Kong of Tsingtao Brewery and Guangdong Shipyard had over 110.5 and 76 times of over-subscriptions. However, in 1995 and 1996, many H-shares companies reported disappointed results. For example, the 1996 annual result of Yizheng Chemical dropped 75% from previous year. In Figure 1, we can find that, from the end of 1993 to the end of 1995, the benchmark H-share index – Hang Seng China

Enterprise Index – had dropped by nearly 64% from its peak level to its lowest level, while the Hang Seng Index only dropped by 1% within the same period.

When H-share companies found difficulties to attract investors, another format of Chinese enterprises – Red Chips companies - became the favour of investors. The Red Chip fever was due to expectations of asset injections into Red Chips by their mother companies. Owing to the success of Red Chips, in 1997, some troubled H-share companies, for example, Shanghai HaiXing (previous name of Shanghai Shipping Development) and Yizheng Chemical, announced to merge with similar SOEs, and created dreams of asset injections for investors. Under such dreams, the share price of these two companies raised up 10 and 3 times respectively. However, this H-share fever last shortly, and was ended in August, 97. Starting from August, 97, mainly owing to the Asian currency crisis, Hang Seng Chinese Enterprise dropped by 74% to an all time low 445.08 points, while Hang Seng Index only dropped by 47%.

After the 15th Communist Party meeting in September, 1997, the Central Government have announced its policies to privatize most small and medium SOEs in the next three years. However, from share price performance, investors have negative sentiment on investing H-share companies. In order to privatize SOEs successfully, SOEs need to have necessary corporate reform or restructure to handle the concern of investors.

In this paper, we will use case-study approaches to understand and analyze the problems of H-shares companies in raising capital, and find out the possible ways to improve their capital raising ability.

¹ Wardley Data Services Ltd.

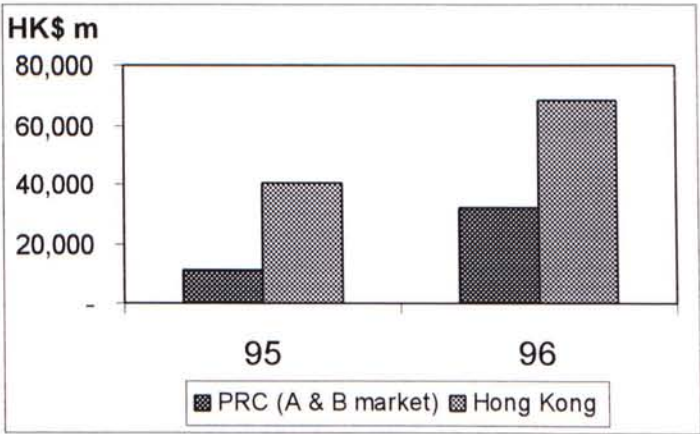
I.II. Why do PRC state-owned enterprises need to raise capital overseas?

I.II.I. Capacity of PRC equity market

The capacity of the PRC equity markets is growing very fast. However, in Figure 2, it is shown that the capacity of Hong Kong is at least 5 times bigger than that of the PRC market.²

Therefore, the equity market in the PRC may not provide enough capacity for capital raising of state-owned enterprises (SOEs). It is possible that the picture of insufficient capacity may be distorted by the listing quota system imposed by the Central Government. Nevertheless, overseas listing can definitely provide additional channels of funding. Therefore, listing in the Hong Kong equity market can provide extra capacity for PRC SOEs.

Figure 2 – Total Capital Raised in Equity Market by SOEs



Source: China Securities & Futures Statistical Yearbook 1997

I.II.II. Foreign Currency

As the economy of the PRC is growing, the PRC needs a large amount of capital, especially foreign currency, to purchase machinery, raw materials and other assets for economic development. Since Renminbi is not easy to be converted into foreign currency, SOEs are

² China Securities & Futures Statistical Yearbook, 97; Annual Report of the Stock Exchange of Hong Kong, 97; The Nasdaq Stock Market 1997 Fact Book & Company Directory; Exchange rate RMB to HKD - (92-93) 0.78, (94-97) 1.07; HKD to USD - 7.80.

better to raise foreign capital directly to repay the debt and procure the necessary materials. Both Shenzhen B-share and Shanghai B-share markets allows SOEs to raise foreign capital in Hong Kong dollars and US dollars respectively. However, in 1996, the total market capitalization of these two B-share markets was only HK\$36.81b⁽²⁾, only 1.37% of Hong Kong market capitalization in the same year. The relatively small B-share market is due to a weak legal systems and inadequate protection to investors. Therefore, overseas capital raising can provide a great opportunity to access the required capital in foreign currency.

I.II.III. Accumulate experience for future SOEs reform

Many management decisions of SOEs in the PRC are substantially influenced by policies of Central Government. Periodically, the PRC Central Government will carefully select a list of 'qualified' SOEs to list in overseas stock markets, including Hong Kong. The Central Government had made its intention that the overseas listing of high quality SOEs is to accumulate experience for future reform of SOEs.

I.II.IV. Promotion

Some SOEs, which export part of its products overseas, may find overseas listing helpful in promoting the company image and exports. Moreover, to the PRC Central Government, overseas listing will also help to improve the image of the SOEs and the PRC economy reform.

I.III. Why do most SOEs prefer listing in Hong Kong to listing in other places?

According to Zhan (1994)³, the decisions of many SOEs to list in Hong Kong may be based on the following reasons:

Table 1 - Hong Kong and New York Average P/E

| Year | Hong Kong | New York |
|------|-----------|----------|
| 1993 | 21.60 | 15.20 |
| 1994 | 10.70 | 12.70 |
| 1995 | 11.40 | 14.00 |
| 1996 | 16.40 | 15.70 |

Source: China Securities & Futures Statistical Yearbook 1997

I.III.I. IPO P/E ratio in overseas market

Firstly, average P/E ratios in overseas market will greatly affect the amount of capital raised of SOEs. Before, many companies refused to list in Hong Kong because of the low P/E ratios of the Hong Kong market. However, from Table

1, we can find the average P/E ratio in Hong Kong market is comparable with the average P/E ratio 16 in the US stock market. Therefore, the ‘P/E ratio’ problem is not as great as general investors perceived.

Secondly, the actual P/E ratio will also be affected by investors’ understanding on companies. For instance, in general, Hong Kong investors will understand more about the economic development of the PRC, and will have a higher confidence on the future development of SOEs than foreign investors. Therefore, Hong Kong investors, in general, are willing to pay a higher price for H-shares than foreign investors.

Thirdly, the sizes of SOEs are comparatively larger than that of many listed companies in Hong Kong. However, the sizes of these SOEs in the United States are only medium. Therefore, listing of SOEs in Hong Kong will attract a greater attention and provide a greater confidence to investors. Then, investors will buy the stock at a higher P/E.

³ Zhan Shao Shan “Development of China securities market”, Worldwide publishing company, (1994)

I.III.II. Cost of listing: IPO & annual operation cost

According to the case of Shanghai Petrochemical ³, the listing fee in US was about US\$20m, which was two times higher than that in Hong Kong. Moreover, the listing operation cost in Hong Kong was about US\$200,000. But the operation cost in US was about US\$400,000 per year. Therefore, the cost of listing in Hong Kong was lower than that in US.

I.III.III. Understanding of the overseas market by SOEs management

Management should understand the listing market such that they can communicate with the investment community more easily, for example, disclosure of appropriate information and promotion of its company to investors. Moreover, with a better understanding on the market, company can use the appropriate instruments to raise capital more easily at a suitable time.

I.IV. Background of SOEs reform

Before the 15th Communist Party Congress, there are 3 major stages of reform on PRC state owned enterprise: 1979 to 1983, 1984 to 1988 and 1989 to present. ⁴

I.IV.I. First stage (1979 to 1983)

- Change from profit remittance system to tax system
- Bonus system of employees: It provided incentives for workers in SOEs to improve labor productivity.
- Government financing through bank loans instead of budgetary grant
- Profit retention scheme: Enterprise could retain profit and output for further development

⁴ Asian Development Bank "Fiscal Management and Economic Reform in the People's Republic of China, 1996", Oxford University Press, (1996)

I.IV.II. Second stage (1984 to 1988)

- “Provisional Regulations on Expansion of Self-Management Powers in State-Run Enterprises”: provided greater autonomy to enterprises in deciding their production mix, production level, labor compensation, investment and use of retained profits; increased the power of SOE manager and decreased the authority of party secretary in factory
- Number of products under price controls decreased
- Introduction of progressive bonus tax: decreased the dispensation of bonuses
- Allowed the existence of different forms of ownership in 1984 and collective and private enterprises to enter many industries
- Eliminate the restriction on the size of Township and Village Enterprise (TVE)
- Income tax replaced by Contract Responsibility System (CRS) in 1987

I.IV.III. Third stage (1989 to before 15th Communist Party Congress)

- Issued Decree No.103 “Regulations on Shift of Management Mechanism for the State-Owned Industrial Enterprises” in 1992: Further expand managerial authority; control the growth of labor compensation; increase the responsibility of SOEs for losses

I.V. Profile and Development of H-share companies

The first H-share company, Tsingtao Brewery, listed in 1993. Up to the end of 1997, there are totally 39 H-share companies listed in Hong Kong. Table 2 ,Table 3 and Table 4 provides the general profile of H-shares companies.

Table 2 - Profile of H-share companies by year (from 93-97)

| Year | Capital Raised (HK\$ m) | No. of companies listed | Average capital raised per company (HK\$ m)* |
|------|----------------------------|----------------------------|---|
| 93 | 8,140.09 | 6 | 1,356.68 |
| 94 | 9,791.70 | 9 | 1,087.97 |
| 95 | 3,091.28 | 2 | 1,545.64 |
| 96 | 7,891.38 | 6 | 1,315.23 |
| 97 | 32,574.45 | 16 | 2,035.90 |

Source: Wardley Data Services Ltd.

Table 3 - Profile of H-share companies by industry (from 93-97)

| Rank | Industry | No. of Companies | Capital Raised (HK\$ m) * | % of total |
|--------|--------------------------------|---------------------|------------------------------|------------|
| 1 | Infrastructure | 6 | 15,642.83 | 25.44% |
| 2 | Oil & Petrochemical | 6 | 12,569.88 | 20.44% |
| 3 | Metal Mining | 4 | 7,764.89 | 12.63% |
| 4 | Aviation | 2 | 7,693.01 | 12.51% |
| 5 | Machinery | 7 | 4,233.25 | 6.88% |
| 6 | Power Supply | 1 | 3,605.29 | 5.86% |
| 7 | Shipping | 2 | 1,904.19 | 3.10% |
| 8 | Real Estate | 1 | 1,696.85 | 2.76% |
| 9 | Miscellaneous Manufacturing | 2 | 1,360.50 | 2.21% |
| 10 | Automobile | 1 | 1,035.00 | 1.68% |
| 11 | Electronics | 2 | 896.06 | 1.46% |
| 12 | Brewery | 1 | 889.28 | 1.45% |
| 13 | Raw Material | 1 | 823.08 | 1.34% |
| 14 | Electrical Appliances | 1 | 738.96 | 1.20% |
| 15 | Pharmaceutical | 2 | 635.84 | 1.03% |
| Total: | | | 61,488.90 | 100.00% |

Source: Wardley Data Services Ltd.

Table 4 – Rank of H-share companies according to the size of capital raised (93-97)

| Rank | Code | Company | Listing Date | Total (HK\$ m)* |
|------|------|--|--------------|-----------------|
| 1 | 1055 | China Southern Airlines | Jul-97 | 5,528.94 |
| 2 | 525 | Guangshen Railway Company | May-96 | 4,230.61 |
| 3 | 338 | Shanghai Petrochemical | Jul-93 | 4,033.90 |
| 4 | 323 | Maanshan Iron & Steel Company | Nov-93 | 3,932.32 |
| 5 | 177 | Jiangsu Expressway | Jun-97 | 3,800.42 |
| 6 | 991 | Beijing Datang | Mar-97 | 3,605.29 |
| 7 | 576 | Zhejiang Expressway | May-97 | 3,412.57 |
| 8 | 1033 | Yizheng Chemical | Mar-94 | 3,360.00 |
| 9 | 670 | China Eastern Airlines Corporation | Feb-97 | 2,164.06 |
| 10 | 325 | Beijing Yanhua | Jun-97 | 1,781.12 |
| 11 | 588 | Beijing North Star | May-97 | 1,696.85 |
| 12 | 107 | Sichuan Expressway | Sep-97 | 1,683.20 |
| 13 | 358 | Jianxi Copper Company Ltd. | Jun-97 | 1,674.03 |
| 14 | 548 | Shenzhen Expressway | Mar-97 | 1,643.40 |
| 15 | 1138 | China Shipping Development Ltd. | Nov-94 | 1,576.80 |
| 16 | 368 | Jilin Chemical Industrial Company Ltd. | May-95 | 1,558.86 |
| 17 | 38 | First Tractor | Jun-97 | 1,507.50 |
| 18 | 347 | Angang New Steel | Jun-96 | 1,450.70 |
| 19 | 1128 | Zhenhai Refining | Dec-94 | 1,428.00 |
| 20 | 1133 | Harbin Power Equipment Company | Dec-94 | 1,210.41 |
| 21 | 1122 | Qingling Textile | Aug-94 | 1,035.00 |
| 22 | 1108 | Luoyang Glass Company | Jul-94 | 912.50 |
| 23 | 168 | Tsingtao Brewery Company Ltd. | Jul-93 | 889.28 |
| 24 | 995 | Anhui Expressway | Nov-96 | 872.63 |
| 25 | 914 | Anhui Conch | Oct-97 | 823.08 |
| 26 | 921 | Guangdong Kelon | Jul-96 | 738.96 |
| 27 | 1053 | Chongqing Iron & Steel Company Ltd. | Oct-97 | 707.84 |
| 28 | 553 | Nanjing Panda Electronics Company | Apr-96 | 515.46 |
| 29 | 1072 | Dongfang Electrical Machinery | Jun-94 | 481.10 |
| 30 | 42 | Northeast Electrical Transmission & Transformation Machinery Manufacturing | Jul-95 | 464.31 |
| 31 | 1202 | Chengdu Telecommunications Cable Co. | Dec-94 | 448.00 |
| 32 | 1065 | Tianjin Bohai | May-94 | 408.00 |
| 33 | 161 | CATIC Shenzhen Holdings | Sep-97 | 380.60 |
| 34 | 874 | Guangzhou Pharmaceutical Company | Oct-97 | 362.84 |
| 35 | 317 | Guangzhou Shipard International Company | Aug-93 | 327.39 |
| 36 | 719 | Shandong Xinhua Pharmaceutical | Dec-96 | 273.00 |
| 37 | 350 | Jingwei Textile Machinery Company | Feb-96 | 233.23 |
| 38 | 187 | Beiren Printing Machinery | Aug-93 | 208.00 |
| 39 | 300 | Kunming Machine Tool Company | Dec-93 | 128.70 |

Source: Wardley Data Services Ltd.

* 1 USD = 7.8 HKD

I.VI. PRC SOEs equity shareholding structure

Shares of PRC SOEs are mainly divided into two categories: non-negotiable shares and negotiable shares. The major difference is the latter type can be traded under the Automatic Quotation System of stock exchanges in the PRC, but not the former one. The definition of other types of shares are listed as follows:

Table 5 – Types of shares of PRC SOEs

| Types | Descriptions |
|--------------------------------|---|
| Non-negotiable Shares | |
| 1. Sponsor's Shares | |
| State-owned shares | Held by state-owned entities only, set in light of the <<Interim Measures on the Administration of State-owned shares issued by the Limited Companies>> |
| Domestic Legal Person's Shares | Held by domestics legal person only |
| Foreign Legal Person's Shares | Held by foreign legal person only (includes merchants from overseas, Hong Kong, Macau and Taiwan etc.) |
| 2. Private Placement | Held by foreign legal person, raised before the enforcement of Company Law |
| 3. Staff Shares | Held by staff shares, raised before the enforcement of Company Law |
| Negotiable Shares | |
| 1. A Shares | Held by domestic investors, traded in Renminbi |
| 2. B Shares | Held by foreign investors, traded in HKD (in Shenzhen Stock Exchange) or in USD (in Shanghai Stock Exchange) |
| 3. H Shares | Listed in the Stock Exchange of Hong Kong, traded in HKD |
| 4. Others | N-shares: Listed in the New York Stock Exchange; S-shares: Listed in the Singapore Stock Exchange |

Sources: China Securities & Futures Statistical Yearbook 1997

CHAPTER II

METHODOLOGIES

Over 95% of equity capital raised by SOEs through H-shares listing is in the format of initial public offerings (IPOs) and placing raised at the same time (Appendix I). It is rational that if investors believe share price would increase in the future, they will subscribe or buy the shares even at a higher price. Therefore, it is important to understand the factors, which will increase the shareholder value of H-share companies. This paper would focus on studying the aftermarket IPO performance of H-share companies to study what factors would affect the shareholders value after listing. Moreover, we have adopted a case study approach in this paper to complement to other theoretical studies on SOEs and H-share companies.

There are some studies to address the aftermarket performance of IPOs in US. Moreover, the studies of IPO of H share are not many so far.

Ritter(1991)⁵ analyzed US IPO cases 1975-84 and concluded that “there is substantial variation in the under-performance year to year and across industries, with companies that went public in high-volume years faring the worst.” This pattern are consistent with an IPO market in which investors are periodically overoptimistic about earnings potential of young growth companies and firms take advantage of these “windows of opportunity.”

Hensler, Rutherford and Springer(1997)⁶ examined the factors which affect the survival of IPO in the aftermarket. Their conclusion is that “the survival time for IPOs increases with size, age of the firm at the offering, the initial return, IPO activity level in the market, and the percentage of insider ownership, while the survival time decreases with increases in the

⁵ Jay R. Ritter, “The Long run performance of initial public offerings”, The Journal of Finance Vol. XLVI No. 1 (March 1991)

general market level at the time of the offering and the number of risk characteristics.” And also the survivability is also affected by industry like negatively in the computer and data, wholesale, restaurant, or airline industries and positively in the optical or drug industries.

Chan(1995)⁷ studied specifically on H share companies. He addressed three problems of H share companies: agency costs problem, asymmetric information problem and conflict of interests. Agency costs problem is caused by the fact that the majority share holders of SOEs are still Government entities. The agency objective to maximize the share holders value is sometimes different from the Government objective.

The first criterion to select these two companies for case study is “share price appreciation (PA) relative to Hang Seng Index (HSI) after 250 trading days (approximately one year after the first trading day).” (We assume the market is efficient, and the closing price of first trading day would reflect the intrinsic value of the company.)

$$PA \text{ to HSI} = PA_{\text{stock}}/PA_{\text{HSI}}$$

$$PA_{\text{stock}} = \text{Share price at the first trading day} / \text{Share price at 250 days later}$$

$$PA_{\text{HSI}} = \text{HSI at the first corresponding trading day of the H- share} / \text{HSI at 250 days later}$$

Out of 39 H share companies, only 24 companies had more than 250 trading days. Therefore, we selected the best and worst companies among the 24 companies.

⁶ Hensler, Rutherford, Springer, “The Survival of Initial Public Offerings in the Aftermarket”, The Journal of Financial Research. Vol. XX, No. 1 93-110, (Spring 1997)

⁷ Chan Hing-lin, “An alternative to Privatization: the listing of H-shares in Hong Kong”, Hong Kong Baptist University (1995)

The second criterion is the IPO year. According to Ritter(1991), We can minimize the variation due to stock markets if we select two companies which went to public in the same year.

As a result, we selected Yizheng Chemical Fibre as the best performance company and Harbin Power Equipment Company Limited as the worst one (Appendix II). Comparing the two cases will allow us to uncover insights for further discussion of key factors to fund raising in Hong Kong market.

The framework to compare is the following five areas which may mostly affect their earning and share price. These five factors are:

- Agency Cost
- Government Control
- Asymmetric Information
- Industry
- Strategy

In addition to ordinary factors, we also consider the government factors because majority shareholders of most SOEs are still government entities. We also think “investor relation” is important in order for SOEs to create trustful relationship between the companies and investors.

Framework of Comparison

II.1. Agency cost problems

Jensen and Meckling (1976)⁸ defined the agency cost as the sum of (1) the monitoring expenditures by the principal, (2) the bonding expenditures by the agent, and (3) the residual

⁸ Jensen and Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure” *Journal of Financial Economics* 3 305-360, (1976)

loss. When managers (agents) do not share the same objectives with shareholders in a company, managers cannot endeavor to maximize shareholders' value. This agency cost problem, which may happen in any company without an appropriate management structure and corporate governance, will directly affect its future profitability and share price performance. As Chan (1995)⁷ pointed out, this problem is a cause of "conflict of interests" such as the issue of layoff, raising public-utility charge or commodity price, etc.. Top management staff in SOEs "views their job as a stepping stone to a more rewarding position of the bureaucratic ladder because they are mostly government officers".

Morck (1988)⁹ mentioned at low levels of management equity ownership, an increase in their shareholdings more closely aligns managers' and outside shareholders' interests. Beyond some point, further increases effectively insulate managers from outside shareholder demands, but allocate corporate resources in their own self-interest. Bagnani (1994)¹⁰ mentioned that when managerial ownership is low, an increase in managerial ownership increases management's incentives to increase stockholder wealth at the expense of bondholder wealth.

- Management

Study the background and experience of management, management structure, their relationship with local and/or central Government.

- HRM strategy

Measure the percentage of management equity ownership, and their remuneration.

⁹ Morck, R.A. Shleifer, and R.W. Vishny, "Management Ownership and market valuation: An empirical analysis", *Journal of Financial Economics* 20, (1988)

¹⁰ Elizabeth Strock Bagnani, Nikolaos T. Milonas, Anthony Saunders, Nickolaos G. Travlos, "Managers, Owners, and the pricing of risky debt: an empirical analysis", *The Journal of Finance* (June 1994)

II.II. Government control

According to Chan (1995)⁷, principals and agents of H-share companies have the conflict of interest. Majority shareholders of all H-share companies are government departments or organizations. The establishment of SOEs in the PRC, including H-share companies, is to serve the needs of the whole nation. However, the national interest may not be the same of that of H-share holders, which is to maximize the profit and shareholders' value. Such potential interest conflicts may affect the confidence of H-share holders and ultimately affect the share price performance.

- Degree of regulation on industries(e.g. control on price and competition)

Study how the regulations of Central and/or local government affect the sales and profits of the companies, for example, taxation, import custom

- Central and local government relations

Investigate any significant events caused by Central and/or local government (majority shareholder) who had different interest from minority shareholders.

II.III. Asymmetric Information

Asymmetric Information consists of three problems: the selection problem, the hidden action problem and the costly state verification problem (Hillier (1997)¹¹). The selection problem is caused by the knowledge difference between investors and management. The hidden action problem is that the investors can not observe the investment decision by management because of their hidden action. The last one is that investors are required to pay costs to have a transparency of management.

¹¹ Hiller, Brian, "The Economics of Asymmetric Information", Macmillan Press Ltd. (1997)

As Akerlof (1966)¹² mentioned, purchasers have to identify good products from bad products. There is considerable evidence that quality variation is greater in underdeveloped, for instance, Mainland China, than in developed areas. Lack of trust will drive investors out of H-share market. Certain “guarantee” should be made to investors to build up the trust of investors.

The quantity and quality of information disclosed by management of H-share companies are highly affected by the degree of trust to investors of management and their management behaviour. Without sufficient transparency, investors do not have enough confidence on the future performance of H-share companies, and sell the shares, which will results in lower share prices. Craven and Marston (1997)¹³ mentioned that the meetings between management and investors, and use of non-executive chairman can reduce information asymmetry.

- Information disclosure

Study how often the companies disclose its information to general public and other interest groups, for example, equity analyst, and the quality of information – difference between the information disclosed and the real results.

- Accomplishment of the plans in prospectus and annual reports

Find out how many objects and projects, which were promised or forecast in the annual reports, could not been achieved and accomplished.

II.IV. Industry

Porter (1985)¹⁴ had pointed out that “the first fundamental determinant of a firm’s profitability is industry attractiveness.” Moreover, the collective strength of the five forces:

¹² George A. Akerlof, “The market for “Lemons” quality uncertainty and the market mechanism”, *Quarterly Journal of Economics* (1966)

¹³ B.M. Craven and C.L. Marston, “Investor Relations and Corporate Governance in Large UK Companies”, *Corporate Governance* (Vol. 5, Number 3, July 1997)

¹⁴ Michael E. Porter, “Competitive Advantage”, *Free Press* (1985)

threat of potential entrants, bargaining power of buyers, threat of substitute products and services, bargaining power of suppliers, threat of new entrants and rivalry among existing firms, determines the ability of firms in an industry to earn, on average, rates of return on investment in excess of the cost of capital. Therefore, if the profitability of the whole industry is going up, the profit of a company will also rise. Therefore, we attempt to understand how the industry affects the profits of H-share companies by applying:

- Industry growth rate and Product life cycle and
- Porter's five forces model

II.V. Strategy

According to Porter (1985) ¹⁴, positioning determines whether a firm's profitability is above or below the industry average. The successes of these strategies will ultimately increase their profits. We will specially focus on studying any strategic changes of H-share companies before and after listing, and comparing their strategies with other comparable companies:

- Competitive Strategy (cost leadership, differentiation, or focus) and planning (e.g. restructuring)
- Production/operation
- Marketing/Sales

Investigate what is the key competitive strategy, and how well the companies perform.

Finally, we may have a certain limitation to draw a generalized conclusion from our project, because our approach is Case methods. However, we believe our research will be a base for the further study of H share companies.

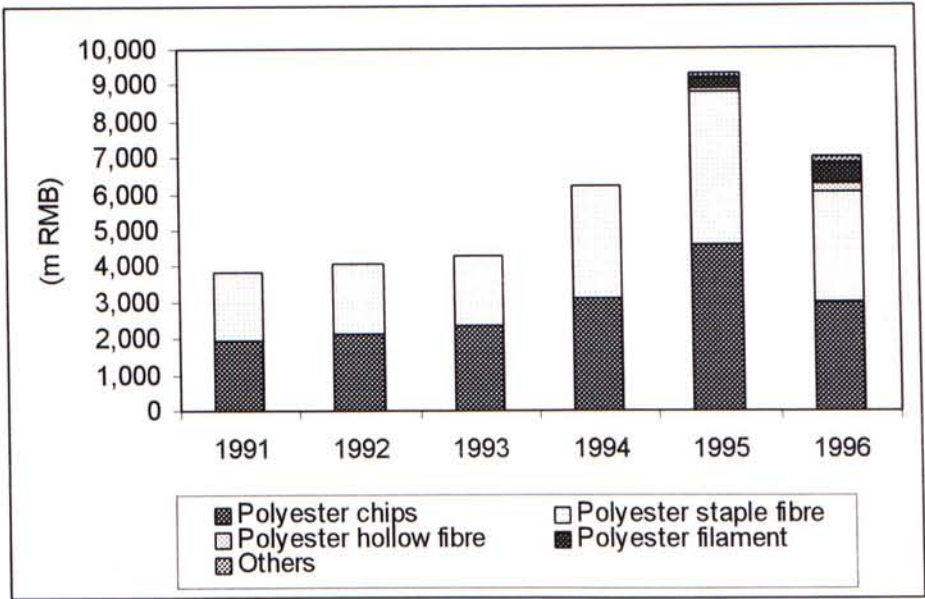
CHAPTER III

CASE STUDY: YIZHENG CHEMICAL FIBRE COMPANY LTD.

III.I. Background

Yizheng Chemical Fibre Company Ltd. (“Yizheng”) (SEHK Code: 1033) is a joint stock PRC state-owned enterprise. It was the seventh state-owned enterprise listed on the Stock Exchange of Hong Kong and was listed on March 29, 1994. The principle business of Yizheng is to produce and distribute polyester products. Yizheng is the 4th largest polyester producer in the world. In 1996, its production capacity represented 44.8% of the total polyester production capacities in the PRC and the PRC market accounted for 94.6% of the total sales of Yizheng.

Figure 3 – Yizheng turnover break down



Source: Yizheng 94 H-share listing prospectus and annual Reports

History

In response to the severe shortage of natural fibres in the PRC, the PRC Government had identified the polyester industry, especially synthetic fibre industry, as a priority for further development in the Fifth Five-year Plan (1976-1980). Finally, the State Council approved the establishment of polyester production facilities – Yizheng Joint Corporation of Chemical Fibre Industry (“YJC”), holding company of Yizheng. The project was established in the

Yizheng City, capital of Jiangsu Province. The plant construction was divided into two phases – Phase I and Phase II completed in 1987. (Refer to Table 15, P.31)

Listing

In December, 1981, YJC was established as a joint limited liability, 70% owned by the Textile Ministry (presently called “Textile Council”) and 30% owned by CITIC, to take over the production facilities. Being a state-owned enterprise, YJC had to undergo a restructuring into a joint stock limited company before listing (Figure 4). On December 31, 1993, Yizheng was established under YJC. Then, Yizheng listed its shares as followings:

- Listed 1 billion H-shares in the Stock Exchange of Hong Kong on March 29, 1994 at HK\$2.38 per share (international over-subscription: 9x; public over-subscription: 20.21x)
- Listed 200m A-shares in the Shanghai Stock Exchange on April 11, 1995 at RMB 2.68 per share;
- Listed 400m H-shares in the Stock Exchange of Hong Kong on April 26, 1995 at 2.45 per share (US\$31.68 per ADR)

Table 6 – Share Capital Structure

| Share type | Category | Owner | No. of shares (m) | % |
|------------|--------------|--|-------------------|-----|
| A-share | Legal Person | Yihua Group Corp. (“Yihua”) (formerly called YJC) | 1,680 | 42 |
| | Legal Person | China International Trust & Investment Group (“CITIC”) | 720 | 18 |
| | Public | N/A | 200 | 5 |
| H-share | Public | N/A | 1,400 | 35 |
| | | | Total | 100 |

Source: Wardley Data Services Ltd.

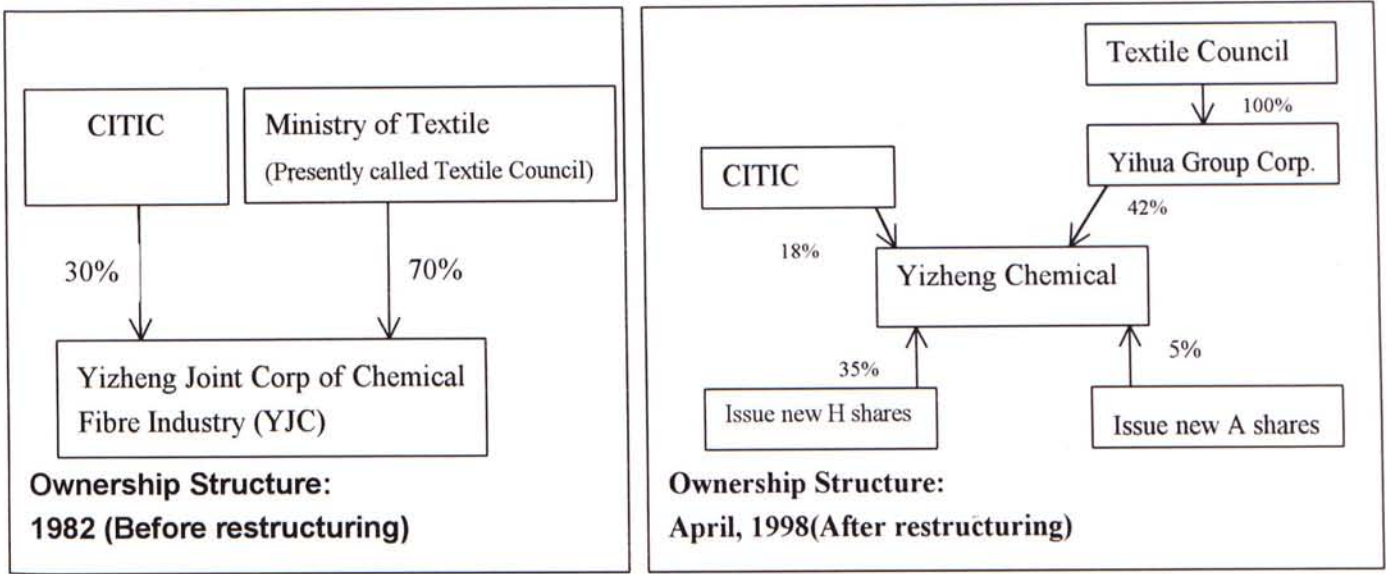
The listing lead manager of Yizheng was S.G. Warburg Securities, which is now called SBC Warburg Dillion Read.

Usage of Capital raised from all H-share and A-share is as follows:

- Repayment of outstanding foreign currency borrowings relating to Phase I & II;
- Capital required for Phase III development to increase the production capacity

- For working capital

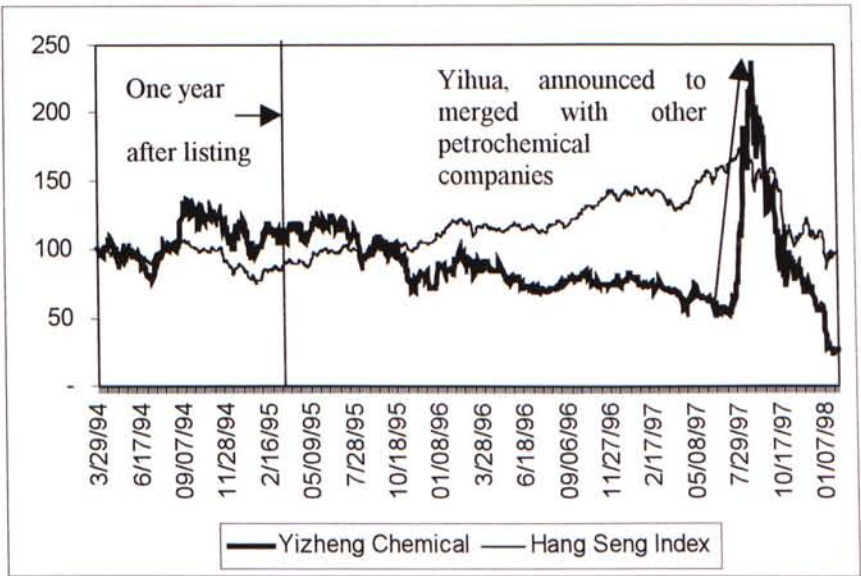
Figure 4 - Ownership restructuring of Yizheng



Source: Yizheng 94 H-shares listing prospectus and annual reports

In 1995, Phase III development was completed. In 1997, State Council approved the merge of the Yihua Group Corporation with other 3 petrochemical state-owned enterprise. (Section III.III.V). In March 1998, the detailed development plan of Phase IV was approved by the State Council. Details of history of Yizheng refer to Appendix III.

Figure 5 – Relative Share Price Performance of Yizheng (First trading day = 100)



Source: Datastream

After listing its H-shares in March 1994 for one year, the share price of Yizheng raised 30% relative to the Hang Seng Index. However, because of the poor financial results, its share price dropped against Hang Seng Index afterwards. From July 30, 97 to the following weeks, the share price suddenly increased by nearly 200% because Yihua, parent company of Yizheng, announced to merge with other petrochemical companies, and the investment public hoped assets would be injected into Yizheng in the future. Afterwards, the share price dropped. Especially after the market turmoil in October 1997, it reached the lowest price HK\$0.54 on January 23, 1998 which was only 23% of its listing price.

III.II. Agency Cost

We assess the possibility of existence of agency cost in Yizheng by analyzing the following information of management:

- Management Structure
- Management Ownership of the company
- Remuneration

III.II.I. Management Structure

Table 7 lists the management structure of Yizheng. In 1996, board of directors comprised 10 executive directors and 2 non-executive directors.

Table 7 - Management Structure of Yizheng

| Shareholder Background | Title | | | | Age | Nationality | Career in Government /Party | Academic Background | No. of years in Yizheng* |
|---------------------------|-----------------|------|------|------|-----|-------------|--------------------------------|------------------------|--------------------------|
| | 1993 | 1994 | 1995 | 1996 | | | | | |
| Ms. Wu Wen-ying | Textile Council | C | C | C | 65 | Chinese | Yes | Engineer | 13 |
| Mr. Huang Ji-chun | CITIC | VC | VC | VC | 63 | Chinese | No | Eng., MBA | 3 |
| Mr. Ren Chuan-jun | Textile Council | VC | VC | VC | 52 | Chinese | Yes | Economic | 15 |
| Mr. Zhu Ke-li | Textile Council | ED | ED | ED | - | Chinese | No | Engineer | 14 |
| Mr. Chen Jin-fang | N/A | ED | ED | ED | 51 | Chinese | No | Engineer | 16 |
| Mr. Ma Yu-ping | N/A | - | - | - | ED | Chinese | No | Engineer | 14 |
| Mr. Xu Zheng-ning | N/A | - | - | - | ED | Chinese | No | Engineer | 13 |
| Mr. Chang Jun-chuan | Textile Council | ED | ED | ED | ED | Chinese | Yes | Engineer | 3 |
| Mr. Yang Dong-hui | Textile Council | ED | ED | ED | ED | Chinese | Yes | Economic | 3 |
| Mr. Zhou Shao-qi | CITIC | ED | ED | ED | ED | Chinese | No | Engineer | 3 |
| Mr. Liao Shao-yuan | CITIC | ED | ED | ED | ED | Chinese | No | Accounting | 3 |
| Mr. Yuan Bao-hua | N/A | NED | NED | NED | NED | Chinese | Yes | N/A | 3 |
| Mr. Zhang Yao-hua | N/A | NED | NED | NED | NED | Chinese | Yes | N/A | 3 |
| Mr. Qian Heng-ge | N/A | - | - | SV | SV | Chinese | Yes | Economic | 12 |
| Mr. Huang Gui-geng | N/A | SV | SV | SV | SV | Chinese | Yes | Engineer | 14 |
| Ms. Fang Xiao-juan | N/A | SV | SV | SV | SV | Chinese | No | Engineer | 14 |
| Mr. Wang Chao-lu | Textile Council | - | - | - | SV | Chinese | Yes | Engineer | 1 |
| Mr. Chen Guan-qing | Textile Council | SV | SV | SV | - | Chinese | Yes | Engineer | 3 |
| Ms. Long Xing-ping | CITIC | SV | SV | SV | SV | Chinese | No | Engineer | 3 |

C: Chairman of Board; VC: Vice-Chairman of Board; ED - Executive Director; NED - Non Executive Director; SV - Supervisors

Source: Yizheng annual reports

* - data in 1996

From Table 8, we observe that half of the directors have worked in Government departments. 4 directors are presently management of Textile Council. Textile Council, reorganized from Ministry of Textile, was a government organization to regulate the Textile industry in the PRC. It wholly owned the YJC, which was the majority shareholder of Yizheng. Chan (1995)⁷ mentioned management in H-share companies with governmental background might use their positions as step stones for senior positions. Therefore, representatives from ultimate majority shareholders, Textile Council, can effectively protect its interest. However, potential agency problems may exist because of the difference between the objectives of management and shareholders.

Table 8 - Previous/Present Government Positions of Yizheng Directors

| Name | | Positions Previous/Present Government Positions |
|---------------------|-----|---|
| Ms. Wu Wen-ying | C | President of Textile Council |
| Mr. Ren Chuan-jun | VC | Vice-President of Textile Council |
| Mr. Chang Jun-chuan | ED | Head of Personnel Resources Department of the Textile Council |
| Mr. Yang Dong-hui | ED | Head of Economic Adjustment Department of the Textile Council |
| Mr. Yuan Bao-hua | NED | Previous Vice-Minister of State Planning Commission |
| Mr. Zhang Yao-hua | NED | Previous Major of Nanjing |

Source: Yizheng 94 H-shares listing prospectus

Under Exchange Listing Rules Section 3.10 and 19A.20(1), board of directors of all locally listing Chinese companies must include at least two independent non-executive directors. These two independent non-executive directors must not involve into any management affairs of the company and not have shareholdings greater than 1%. They should be able to demonstrate an acceptable standard of competence and adequate commercial or professional experience to ensure that the interests of the general body of shareholders will be adequately represented. In Yizheng annual reports, we can only find two non-executive directors. Through our telephone interviews, the representative from the Stock Exchange of Hong Kong described these two non-executive directors should be the two independent non-executive

directors of Yizheng. However, Mr. Yuan Bao-hua had worked for various Government officials, and Mr. Zhang Yao-hua had worked for YJC and was General Manager of YJC until 1983. Although both of them are independent non-executive directors, their past experience with the PRC Government and YJC may show they are not really independent as expected.

III.II.II. Remuneration

Table 9 listed the remuneration and bonus given to different categories of management from 1994 to 1996. Every management in the category receives the same level of salary.

Table 9 - Remuneration & Bonus of management in Yizheng

| Salary & other remuneration for the year (RMB) | Executive Director | Supervisors | Senior Manager |
|---|---------------------------|--------------------|-----------------------|
| 1994 | 46,000 | 30,000 | 30,000 |
| 1995 | 47,808 | 39,840 | 39,840 |
| 1996 | 59,330 | 49,441 | 49,441 |

| Salary Growth Rate (%) | Executive Director | Supervisors | Senior Manager | EPS growth rate (%) |
|-------------------------------|---------------------------|--------------------|-----------------------|----------------------------|
| 1993 vs. 1994 | N/A | N/A | N/A | 24.19% |
| 1994 vs. 1995 | 3.93% | 32.80% | 32.80% | 1.95% |
| 1995 vs. 1996 | 24.10% | 24.10% | 24.10% | -82.80% |

| Bonus for the year (RMB) | Executive Director | Supervisors | Senior Manager |
|---------------------------------|---------------------------|--------------------|-----------------------|
| 1994 | 10,000 | 8,000 | 8,000 |
| 1995 | 10,000 | 8,000 | 8,000 |
| 1996 | 10,000 | 8,000 | 8,000 |

Source: Yizheng annual reports

In the past few years, the remuneration growth rate was higher than that EPS growth rate. It is mainly due to the service contract of directors entered in 1994. The listing prospectus of Yizheng stated that:

“The aggregate annual salaries payable to all the Executive Directors is **RMB 360,000** (divided equally between them) subject to an increment (after inflation) of **not less than 18%, but not more than 40%** for each subsequent year within the contract term.”

However, prospectus and annual reports did not mention which entity was responsible to decide the amount of salary increase.

The listing prospectus also stated terms concerning bonus for management:

“Each of the executive directors is entitled to a management bonus by reference to the consolidated net profit of the Company (excluding extraordinary items) after taxation and minority interests as decided by the **Board of Directors** provided that the annual amount of bonus payable to each of the Executive Directors may not less than **RMB 10,000** and the annual aggregate of bonus payable to all the executive Directors may not exceed 1% of such profit.”

It is unusual to let board of directors to decide their own bonus although only the lowest level of bonus was granted in the last few years. The system allows potential agency problem to happen.

In 1997, a new service contract was signed with more favourable terms:

- Annual aggregated salaries were revised from RMB 360,000 to RMB 480,000.
- Minimum bonus was revised from RMB 10,000 to RMB 15,000.

Remuneration of directors in H-share companies is typically lower than that in other locally listed companies. We agree appropriate annual adjustment in remuneration is necessary to increase the motivation of management. However, in the case of Yizheng, remuneration of directors does not account for the performance of the companies. Especially in the case of 1995 (See Section III.IV.III below), potential negligence of management might have happened in 1995. But there was still a large salary increase in every level of management. Together without further explanation of the reasons for such large increase, agency problem may exist in Yizheng.

III.II.III. Management Ownership

Table 10 – Shareholdings of directors & other management of Yizheng

| No. of A shares held | 1994 | 1995 | 1996 |
|--|-----------------|----------------|----------------|
| Directors | | | |
| Ren Chuan-jun | 3,000 | 3,000 | 3,000 |
| Chen Jin-fang | 2,800 | 2,800 | 2,800 |
| Zhu Ke-li | 2,800 | 2,800 | 2,800 |
| | (3 out of 12)* | (3 out of 12) | (3 out of 12) |
| Supervisors | | | |
| Ren Yong-liang | 2,300 | N/A | N/A |
| Qian Heng-ge | N/A | 2,000 | 2,000 |
| Huang Gui-geng | 2,300 | 2,300 | 2,300 |
| Fang Xiao-juan | 2,300 | 2,300 | 2,300 |
| | (3 out of 5) | (3 out of 5) | (3 out of 5) |
| Senior Management | | | |
| Xu Zheng-ning | 2,600 | 2,600 | 2,600 |
| Ling Ai-bao | 2,600 | 2,600 | 2,600 |
| Zheng Da-zhong | 1,000 | 1,000 | 1,000 |
| Wang Shi-lin | 2,600 | 2,600 | 2,600 |
| Jiang Shi-cheng | 2,800 | 2,800 | 2,800 |
| Jiang Yi-fen | 2,600 | N/A | N/A |
| Fang Han-ping | 2,000 | N/A | N/A |
| | (8 out of 8) | (6 out of 7) | (6 out of 7) |
| Total number of shares owned by management | 34,300 | 29,400 | 29,400 |
| Total number of outstanding shares | 3,400,000,000 | 4,000,000,000 | 4,000,000,000 |
| % amount of management ownership | 0.0010% | 0.0007% | 0.0007% |

* - (3 out of 12) means 3 directors out of 12 have owned shares in Yizheng.

Source: Yizheng annual reports

In Yizheng, some directors and supervisors owned shares of Yizheng. However, this amount of share ownership by management is low to have enough incentives to serve the best interest of shareholders.^{9 10}

III.III. Government Control

III.III.I. Product and raw material prices

Before 1992, all polyester product prices were set by the Commodities Price Bureau. Afterwards, the polyester chip and staple fibre prices were deregulated in 1993 and 1994 respectively. Moreover, the prices of raw materials – PX, PTA and MEG¹⁵ were also deregulated. The Government control on both product and raw materials prices are weak. However, in 1996, worldwide PTA supply could not meet the demand. But Yangzi Chemical's PTA price decreased from RMB 12,550 (4Q95) to RMB 11,600 (1Q96), and its selling price for Yizheng was lower than that¹⁶. Government can still control the prices indirectly.

III.III.II. Taxation

According to a directive (Cai Shui Zie [1997] No. 38) dated March 3, 1997 issued by the PRC State Tax Bureau and the Ministry of Finance, the rate of income tax payable by Yizheng was confirmed to be 15%, as compared to 33% applicable to other PRC domestic enterprises.¹⁷ Income tax rates applicable to the Yizheng principal subsidiaries in the PRC range from 15% to 33%. This decision of the PRC Government can improve the shareholder value of Yizheng.

III.III.III. Import custom

Government charges a high customs on the imported products and Yizheng can sell products at a higher price in the short run. However, if the PRC join the WTO in the future, the import custom will be reduced substantially and the competitiveness of Yizheng will be doubtful.

Table 11 – Import custom of Yizheng products

| | Staple fibre | Filament |
|---------|---------------------|-----------------|
| 1992-93 | 30% | 50% |
| 1994-96 | 28% | 45% |

Source: Yizheng annual reports

¹⁵ PX – Paraxylene, PTA - Purified Terephthalic Acid, and MEG - MonoEthylene Glycol

¹⁶ Hong Kong Economic Times (96/2/1)

III.III.IV. Product mix

Since Yizheng was originally established by Ministry of Textile (now called Textile Council), its product range would be mainly focused on polyester fibre. Polyester industry is cyclical in nature. Ritter (1991)¹⁸ found that market less prefer those cyclical industries with potentially higher risk. Therefore, a typical large-scale petrochemical company, like Yizheng, would diversify its product mix.

On June 27, 1996¹⁹, Yizheng announced its Phase IV development proposal (Appendix III) which included development of production facilities for PX, an important raw materials for Yizheng. Then, Sinopec, subsidiary of Ministry of Chemical, had reservation on the Phase IV development of Yizheng because the upstream petrochemical products were typically produced by Sinopec's subsidiaries and Yizheng was belonged to Textile Council. Eventually, the PX development plan was excluded in the finalized Phase IV development. Therefore, development of Yizheng would be potentially subject to the influence of Central and local governments.

III.III.V. Mergers & Acquisition under Government Policies

According to the Minister of Chemical Industry, 100 or more large chemical firms will be encouraged to merge to become about 55 conglomerates by 2000. The aim is to create several world-scale conglomerate giants by 2010. As proposed by the State Council, Yizheng Chemical Fiber's parent, Yihua group, will be merged with 3 neighbouring chemical firms: Yangtze Petrochemical (refining/petrochemicals) ("Yangtze"), Jinling Chemical (refining), and Nanhua Chemical (inorganic chemicals). It will help Yizheng to save 20% of its required

¹⁷ 1996 Yizheng Chemical Annual Report

¹⁸ Jay R. Ritter, "The Long run performance of initial public offerings", *The Journal of Finance* Vol. XLVI No. 1 (March 1991)

¹⁹ Hong Kong Economic Times (96/8/27)

volume.²⁰ Yangtze was belonged to the Ministry of Chemical, and actually developed, together with Yizheng, under the same project of the Fifth Five-year Plan to solve the problem of severe shortage of natural fibre.²¹ And it was the major supplier of Yizheng. Therefore, the direct value created for Yizheng is to have certain amount of raw materials supply from Yangtze and the price of raw materials will be more favourable to Yizheng.

Actually, the share price of Yizheng increased substantially after the news of mergers because the investment public expected Yizheng and other H-share companies would have a series of asset injections similar to that of red chips in Hong Kong.

III.III.VI. Government intervention on capital raising decisions

Before H-share listing, Yizheng had already been approved by State Council Securities Commission to issue 600m new A-shares.²¹ However, on September 16, 1995, Yizheng announced it cancelled the plan to issue 400m A-shares and instead issue 400m H-shares. "This is a favourite stock of foreigners, but they may be proved wrong this time and this decision could affect confidence" said Ambrose Chang, fund manager at East Asian Harrison Asset Management.²²

Initially, Yizheng planned to use proceeds from A-share listing for its expansion plans, repayment of bank borrowings and working capital. Owing to the austerity programme in 1994, the investment sentiment was very weak in both stock exchanges in the PRC. On August 3, 1994, China Securities Regulatory Commission announced no A-share could be listed in 1994 in order to eliminate the adverse effect of the new supply on the market. The A-share listing plan of Yizheng was delayed to 1995. In January 1995, Yizheng only issue 200m

²⁰ Goldman Sachs China Research (97/9/15)

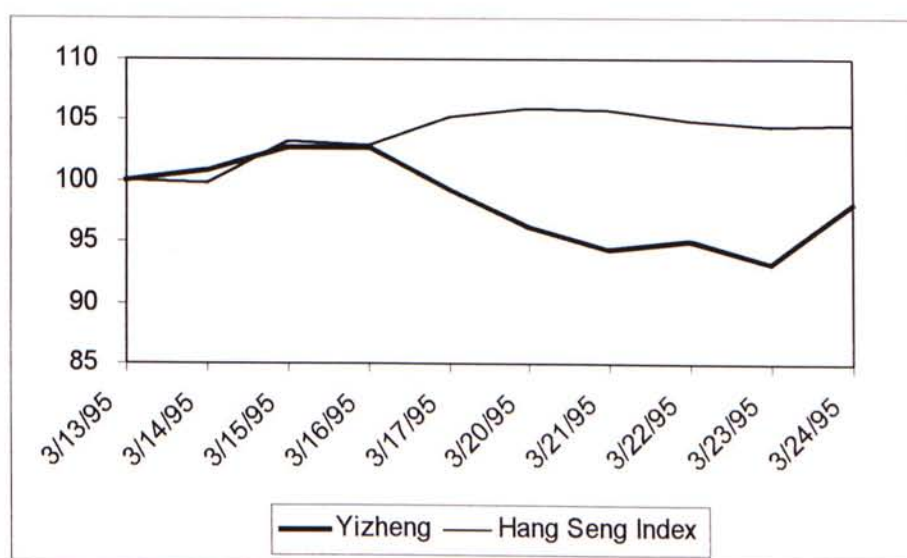
²¹ Yizheng 94 H-share listing prospectus

²² Herald Tribune (95/2/21)

A-share which was only one third of its original plan. Owing to the weak trading volume, the listing of these A-shares in Shanghai Stock Exchange was delayed to April 11, 1995.

According to the H-shares listing prospectus (P.6) of Yizheng: “In the event that the new A Share issue is not completed, alternative sources of financing will have to be considered to provide funds...”. Owing to the capital needs for further development, on March 16, 1995, Yizheng announced to change its plan to issue 400m H-shares instead. This financing change would have the same effect of dilution in earnings per share. However, owing to the structural difference between A-share and H-share, new issuance of 400m H-shares would increase the supply of H-shares by 40%. From Figure 6, we can observe that after issuance announcement, the share price of Yizheng has dropped 9.43% within one week, but Hang Seng Index rose 1.48% at the same time. And their break of ‘promise’ did affect the confidence of investment public on Yizheng and H-shares as a whole in the long run.

Figure 6 – Share Price Performance after new H-shares issuance announcement
(Relative value on March 13, 1995 = 100)



Source: Datastream

Eventually, the issuance of new H-shares was approved by the Stock Exchange of Hong Kong, China Securities Regulatory Commission and annual general meetings of both A and

H-shares. And new 400m H-shares were listed in the Stock Exchange of Hong Kong in April 1995.

“It is policy problem in China. They’re trying to intervene in the market a bit too much ” said Ambrose Chang.²² It is a typical story about government control on state-owned enterprise and the interest conflicts among different categories of shareholders. In order to protect the PRC stock market, China Securities Regulatory Commission ignored the previous approval and did not allow Yizheng to issue A-shares in 1994. Moreover, the majority shareholder of Yizheng held A-share instead of H-shares. Issuance of H-shares will only be harmful to the H-share price but not the A-shares. But it hurt the confidence of both the H-share holders and other investment public.

III.IV. Asymmetric Information

III.IV.I. Analyst coverage

There are about 25 investment banks and 35 equity analysts evaluating the performance of Yizheng.²³ where, for example, only 14 banks cover Zhejiang Expressway, 19 banks cover Zhenhai Refining and 16 banks cover Harbin Power Equipment. (Section IV.IV.I). This result is due to many different factors, for example, larger market capitalization of Yizheng and regional market exposure of Yizheng. However, it undoubtedly reduces the asymmetric information between investment public and management.

III.IV.II. Investment of Institutional Investors

Yizheng successfully placed its H-shares to several strategic international institutional investors when it listed on March 1994:

Table 12 – Strategic Investors of Yizheng

| Name | No. of shares owned in March 1994 (m) | % of H-shares (in March 1994) | No. of shares (m) (on 30/6/97) |
|---|--|----------------------------------|-----------------------------------|
| Amoco Far East Ltd. (Presently called "Amoco Chemicals Asia Pacific Ltd.) | 25 | 2.5% | 21.5 |
| ICI China Ltd. | 25 | 2.5% | >1 |
| Mitsui & Co. Ltd. | 5 | 0.5% | >1 |
| Bank of China - China Fund | 10 | 1.0% | >1 |
| Total: | 65 | 6.5% | N/A |

Source: Wardley Data Services Ltd. and Yizheng 94 H-shares listing prospectus

The first 3 companies are well known international companies and were major suppliers of Yizheng. Their investment in Yizheng improved the confidence of the investment public to Yizheng. However, on June 30, 1997, the shareholding of all these strategic investors were reduced. Since the usual investment horizon of institutional investors is usually long-term, their divestment may mean these investors were pessimistic on the future prospect of Yizheng.

III.IV.III. Incorrect forecast on product prices and profit margin

Although the product prices of Yizheng had dropped 10% from its peak in 1995, on August 31, 1995, Managing Director of Yizheng, Mr. Chen Jin-fang forecasted the product prices would increase from October because demand of textile industry in the PRC would increase.²⁴ In November, 1995, Nava Securities published analyst forecast to warn investors about the 1995 earnings because the prices of raw materials increased substantially, and many textile companies in the PRC incurred loss in 1995. Afterwards, both Nava Securities and Salomon Brothers Securities had revised the earnings forecast of Yizheng in 1995 and 1996 by 20% to 40%, and published SELL recommendations to investors.^{25 26}

²³ Bloomberg – Nelson services (98/3/04)

²⁴ Hong Kong Economic Times (95/9/1)

²⁵ Hong Kong Economic Times (95/11/17)

Table 13 – Financial Results of Yizheng

| RMB (m) | 94 | | 95 | | 96 | |
|--------------------------------------|------|------|------|------|------|------|
| | 1H | 2H | 1H | 2H | 1H | 2H |
| Turnover | 3031 | 3186 | 4397 | 4905 | 3482 | 3517 |
| Net Profit | 461 | 517 | 836 | 377 | 212 | 3 |
| Profit margin | 15% | 16% | 19% | 8% | 6% | 0% |
| Comparing with last year same period | | | | | | |
| Turnover growth (%) | N/A | N/A | 45% | 54% | -21% | -28% |
| Profit growth (%) | N/A | N/A | 81% | -27% | -75% | -99% |

Source: Yizheng annual reports

On January 31, 1996, Managing Director of Yizheng, Mr. Chen Jin-fang forecast the earnings of Yizheng would still have satisfactory increase ²⁶. However, on March 27, Yizheng announced the profit margin in 2nd half of 1995 was decreased substantially without previous warnings. Moreover, Managing Director of Yizheng, Mr. Chen Jin-fang said “Judging from the situation in the first quarter, we are confident we can maintain the same profit margin as last year”²⁷. However, from Table 13, the results of Yizheng are far from the forecast of management.

Negligence might happen in Yizheng because Mr. Chen mentioned the higher inventory squeezed the group’s current working capital, leading to a substantial rise in short-term borrowings.

III.IV.IV. Acquisition of Foshan Chemical Fibre Complex

On August 25, 1995, Yizheng announced it had acquired Foshan Chemical Fibre Complex and its related companies (“FCF”) successfully. Management mentioned the major reason for this acquisition is to achieve the ninth five-year plan. However, the acquisition has incurred a substantial loss to Yizheng.

²⁶ Hong Kong Economic Times (96/2/1)

Before acquisition, FCF was the fifth largest polyester producer in the PRC with production of polyester chips at 27,000 tonnes, polyester fibre at 10,600 tonnes and sewing thread at 500 tonnes. This acquisition improved the worldwide polyester producer ranking of Yizheng from 5th to 4th, in terms of production volume. The consideration of this acquisition was only RMB 1 for Chinese interest and USD 1 each for foreign interest in joint ventures of FCF. However, Yizheng had to guarantee RMB 1.08b debt and agreed to pay RMB 94m for land-use right. According to Mr. Ren Chuan-jun²⁸, the major value created in this acquisition was that Yizheng would help FCF to turnaround by rolling over its high-interest debts and controlling rising raw material costs by allowing it to join long-term supply agreements of Yizheng.

Unfortunately, FCF reported a loss at least RMB 100m in 1996²⁹. In 1997 interim report, Yizheng reported FCF still incurred a loss but the amount was reduced substantially. However, no figure was reported. The major reasons for FCF loss were:

- FCF had difficulties in adjusting its marketing tactics;
- FCF had high utility cost;
- FCF were lack of economies of scale.

It was typically believed that new acquisition might not bring immediate profit, and substantial structural and strategic changes should be implemented in acquired firms. However, in the case of FCF acquisition, all the explanations for losses were not convincing since such problems existed before acquisition.

In order to fulfil the requirement of ninth five-year plan, Yizheng management might have other options for acquisition. Moreover, if Yizheng found the potential problems in FCF acquisition, Yizheng might not guarantee the large amount of loan or negotiate other

²⁷ Hong Kong Economic Journal (96/3/28)

²⁸ South China Morning Post (95/9/1)

favourable terms. The failure of FCF acquisition led to the investment public to query the management quality of Yizheng. Their behaviour was similar to management in large US companies which focus on corporate expansion only but not shareholder value. This is another real case to show the potential agency problem in Yizheng.

III.V. Industry Analysis

III.V.I. Background of the industry: ²¹

Industry Growth

Over the past 10 years to the end of 1992, the world production of polyester fibre has grown in volume terms at a compound rate of 8.6% per annum. According to the forecast by Tecnon, polyester fibre production will grow at a compound rate of 5.3% per annum over the period 1992-99.

Product Prices

The price of polyester in the open market is dependent mainly on the level of demand for particular products relative to production capacity and the price of raw materials. There is also some variation in the price of polyester as between the major regional markets – North America, Europe and the Far East.

Polyester industry in The PRC

The textile industry is a major sector in the PRC economy, accounting for 10.5% of the GDP in 1992. The textile industry is important in meeting both domestic consumption requirements and for exports. With only 0.081 hectares per capita, the PRC has one of the lowest per capita ratios of arable land in the world. The PRC Government has policy to encourage utilizing available land for food production rather than other types of agricultural products, for

²⁹ Hong Kong Economic Journal (97/4/22)

example, cotton. Therefore, polyester industry has a key role in sustaining The PRC textile output.

Synthetic fibre production in the PRC grew from 314,000 tonnes in 1980 to 1,778,000 tonnes in 1992. Out of these totals, polyester fibre has grown to be the most significant synthetic fibre, increasing from 37.7% of the PRC total synthetic fibre production in 1980 to 76.8% in 1992.

According to Tecnon, polyester fibre production in The PRC (including fibre production from imported chip) is projected to grow at a compound rate of 5.6% over the period 1992-99. The PRC had a 13.6% world market share of polyester fibre production in 1992. However, the PRC polyester industry produces mainly commodity products, e.g. filament, staple fibre.

In the demand side, the consumption of polyester fibre in the PRC will increase at a compound rate of 4.4% per annum over the period 1992-99. Domestic production will increase 84.8% of total consumption in 1992 to 92.9% in 1999.

In terms of raw material supply, the PRC consumption of the two major materials (PTA and MEG) for polyester production substantially exceeded the amount produced domestically in 1992 by 43% for PTA and by 65% for MEG. Under the forecast of Tecnon, the rate of under production will be decreased in the future. However, The PRC will heavily depend on the imported petrochemical intermediates to sustain its polyester industry.

Price Regulation

Until the end of 1992, a control price for polyester fibre products sold by Chinese producers in the PRC was set by the Commodities Price Bureau in consultation with the Textile Ministry for each calendar year. From 1993, this price setting procedure was reformed and the price of polyester staple fibre was deregulated, whilst that for polyester chip was based on a

set median control price around which producers could adjust up or down within a range of 10% for standard products. From the beginning of 1994, the prices of polyester chip and staple fibre may be determined by the producers themselves.

III.V.II. Porter Five’s Forces Analysis – Polyester industry in the PRC

Rivalry Determinants

Polyester industry in the PRC is a commodity market. The key products are Polyester chips, filament and staple fibres, and can be produced by many companies where the main difference is the quality of products. Therefore, the switching cost of customers is really low. Companies in the industry will usually sign long-term contract with customers. For instance, in 1992, approximately 56% of Yizheng sales are made through long-term contracts, typically 5-year contracts. Under such contract, customers need to commit a certain volume of purchase with quarterly adjusted market price.

In the PRC polyester fibre market, competitors are mainly regional because of the high transportation cost. The following are the key regional competitors:

Table 14 - Leading polyester producers by 1993 production capacity³⁰

| World Rank | Name | Country/Area | ('000) tonnes |
|------------|---------------------|--------------|---------------|
| 4 | Nan Ya | Taiwan | 605 |
| 5 | Yizheng | PRC | 540 |
| 6 | Hualon | Taiwan | 485 |
| 7 | Teijin | Japan | 454 |
| 8 | Toray | Japan | 447 |
| 10 | Far Eastern Textile | Taiwan | 409 |
| | | Total | 2,940 |

Source: Yizheng 94 H-shares listing prospectus

³⁰ Tecnon estimates in 1993, except figures for Yizheng

Moreover, overseas players can usually dump their products into the PRC by charging a much lower price than the domestic price of their home countries, for example, Taiwan and South Korea. The overseas competition would be much intensive in coastal areas in where the transportation cost of imported products is lower.

Entry Barriers Determinants

Huge capital requirements would be the greatest entry barriers to polyester industry all over the world. For instance, in 1996, the net assets value of Yizheng Chemical was RMB 8.17b for producing 746,000 tonnes of polyester fibre.

The most feasible way to enter this industry is to export the products with the production plants located near the PRC. However, the Government increases the entry barrier of the market by imposing imported tariff on polyester fibre products.

Substitute Determinants

Key polyester fibre products – polyester chips and staple fibre are actually substituted products for natural fibres, for example, cotton. Customers can easily switch to choose between polyester fibres and cotton. However, as mentioned above, the PRC Government principally encourages growing more food than other agriculture products. To textile industry in the PRC, polyester fibre products are always good substituted products for cotton. Therefore, the demand for polyester fibre would be highly subject to the supply and prices of cotton.

Buyer Power Determinants

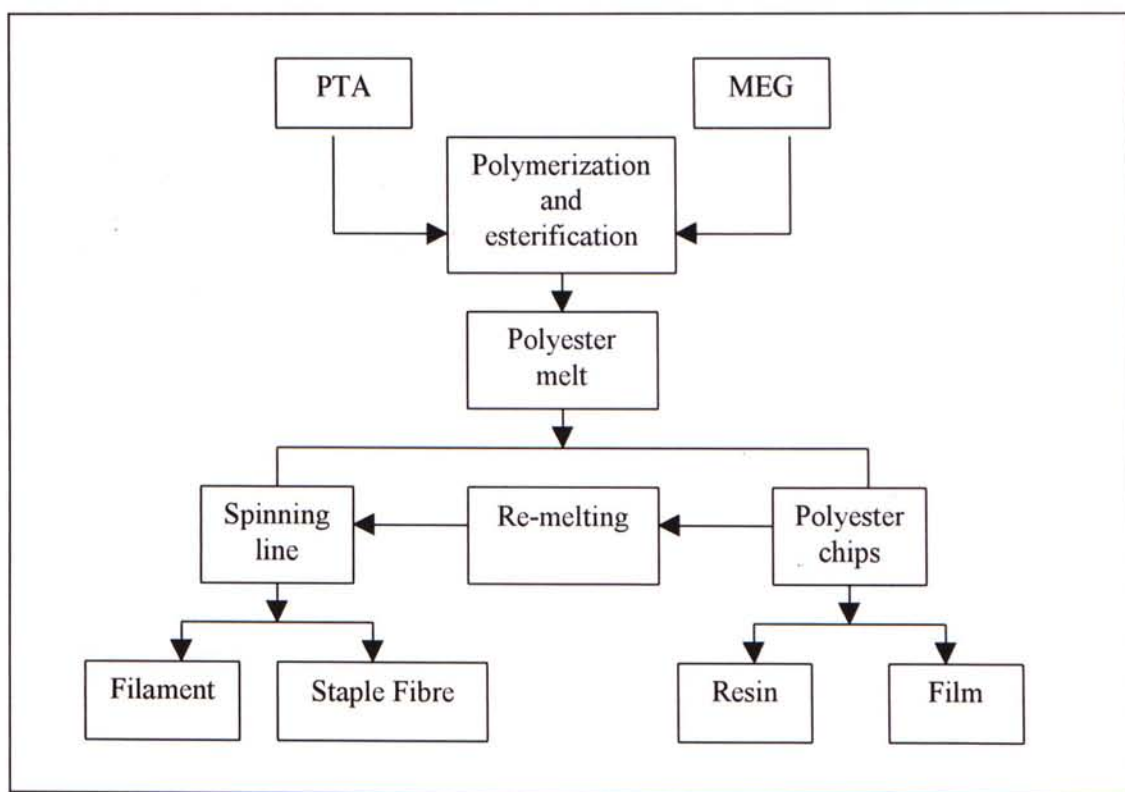
Most buyers are individual textile companies, and buy the products directly or through wholesalers. For example, in Yizheng prospectus, the company generally sells polyester chip directly to end-users and sells polyester staple fibre to wholesalers of textile raw materials in each province. In 1992, the company had around 250 regular customers. The largest single

customer for polyester chip and staple fibre accounted for 5.7% of production volume only. Moreover, the ten largest customers accounted for 33.4% and 28.5% of total sales volume of polyester chips and staple fibre respectively. Therefore, individual buyers do not have substantial negotiation power to the companies.

Polyester fibre products are close to commodity and the switching cost of customers is low. Bargaining power of customers come from the aggregate demand of the textile industry. The 1996 annual report of Yizheng stated that owing to the decrease in domestic textile consumption and export, the demand for textile products, including polyester fibre, decreased substantially.

Supplier Power Determinants

The key raw materials in polyester industry are Purified Terephthalic Acid (usually called PTA), an organic acid, and MonoEthylene Glycol (usually called MEG), an organic alcohol. Both PTA and MEG are petrochemical derivatives. From Yizheng listing prospectus, it utilizes approximately 0.864 tonnes of PTA and 0.341 tonnes of MEG to produce one tonne of polyester polymer.

Figure 7 – Production Flow of Polyester Products

Source: Yizheng 94 H-shares listing prospectus

In order to ensure stable and quality supply of raw materials, polyester producers usually engage into a limited number of key suppliers only. Comparing the bargaining power of buyers, suppliers in general have a higher bargaining power. However, since PTA and MEG are also commodity-like products, prices of these two products are also subject to that in the open market.

Conclusion

Since products and raw materials in polyester industry are commodity-like products, producers are still suffered from the cyclical nature of commodity. Owing to the mismatch timing of the demand and supply, prices of polyester fibre and raw materials, and profit margin of producers will fluctuate periodically. As companies seem to be difficult to differentiate itself from competitors, industry should be one of the most substantial factors to affect the profitability of companies.

III.VI. Strategy

We can understand the principle corporate strategy of Yizheng from the aim stated in 1994 Annual Report:

“Our aim is to enhance Yizheng’s status as an international producer of polyester products and raw materials, by **enlarging production**, developing new products, strengthening ancillary facilities and pursuing well-considered expansion plans.”

As polyester products are commodity-like products, players in that market are subject to the aggregate demand and supply of the products and do not have a large bargaining power in the pricing. Therefore, in order to increase their profits, producers have two choices:

1. Increasing production volume of products;
2. Developing new products to fit the needs of new market segments.

In polyester industry, both strategies require companies to invest a large amount of capital to establish new production facilities.

Therefore, in its annual report, Yizheng establishes itself mainly as a polyester producer and set up the strategies to increase its production and diversify its product mix to increase the profits. At the end, Yizheng expects to increase its profit and achieve economies of scale by increasing its production volume.

Table 15 listed the 3 development phases of Yizheng - increase in the production capacity and diversification of production mix. Meanwhile, Yizheng had also done research and development to improve the efficiencies and productivity of the machinery.

Table 15 – Production Facilities and Capacities of Yizheng

| Phase I | | | |
|--------------------------------|----------------------------|-------------|-------------------------|
| | Production line | Prod. Date | Rated Capacity (tonnes) |
| Plant No. 1 | 1 line: Polyester chips | 12/84 | 63,000 |
| | 2 lines: Staple fibre | 5/84-2/87 | 120,000 |
| Phase II | | | |
| | Production line | Prod. Date | Rated Capacity (tonnes) |
| Plant No. 2 | 1 line: Polyester chips | 07/88 | 63,000 |
| | 2 lines: Staple fibre | 09/87-01/90 | 120,000 |
| Plant No. 3 | 2 lines: Polyester chips | 12/89-10/90 | 126,000 |
| Plant No. 4 | 1 line: Hollow fibre | 04/90 | 4,000 |
| | 1 line: Differential chips | 10/93 | 4,000 |
| | 1 line: Spinning Finishes | 10/93 | 1,800 |
| Phase III | | | |
| | Production line | Prod. Date | Rated Capacity (tonnes) |
| Plant No. 5 | 1 line: Filament | 5/95 | 20,000 |
| PTA plant | 1 line: PTA | 8/95 | 250,000 |
| Plant No. 3 (expansion) | 1 line: Polyester chips | 9/95 | 60,000 |

| Phase | Investment Amount (RMB b) | Construction Period |
|-------|---------------------------|---------------------|
| I | 1 | 1982-87 |
| II | 1.8 | 1985-90 |
| III | ~3.7 | 1990-95 |

Source: Yizheng 94 H-shares listing prospectus and annual reports

Strategies Review

Under our analysis, there are two major problems behind Yizheng's strategy:

- Lack of diversification in product portfolio;
- Lack of diversification in geographical market.

Lack of diversification in product portfolio

In order to review the overall performance of Yizheng, we have tried to find comparable companies for comparison. Among all H-share companies, there is no directly comparable polyester manufacturer. On the other hand, we have chosen two large-scale petrochemical H-

share companies for comparison – Jilin Chemical (SEHK Code No.: 368) and Shanghai Petrochemical (SEHK Code No.: 338). We have used the ratio analysis method for comparison.

Table 16 – Breakdown of Return on Equity (ROE) of Jilin Chemical, Shanghai Petrochemical and Yizheng Chemical

| Jilin Chemical | 1994 | 1995 | 1996 |
|-------------------------------|-------------|-------------|-------------|
| Net Profit Margin | 10.30% | 10.50% | 4.06% |
| X Asset Turnover (average) | 0.67 | 0.68 | 0.56 |
| = ROA (average) | 6.87% | 7.10% | 2.29% |
| X Financial Leverage | 2.36 | 2.33 | 2.51 |
| = ROE (average) | 16.18% | 16.54% | 5.75% |
| Shanghai Petrochemical | 1994 | 1995 | 1996 |
| Net Profit Margin | 15.92% | 17.97% | 8.47% |
| X Asset Turnover (average) | 0.60 | 0.72 | 0.66 |
| = ROA (average) | 9.57% | 12.99% | 5.62% |
| X Financial Leverage | 1.66 | 1.61 | 1.62 |
| = ROE (average) | 15.87% | 20.95% | 9.08% |
| Yizheng Chemical | 1994 | 1995 | 1996 |
| Net Profit Margin | 15.73% | 13.04% | 3.08% |
| X Asset Turnover (average) | 0.79 | 0.77 | 0.51 |
| = ROA (average) | 12.37% | 10.10% | 1.57% |
| X Financial Leverage | 1.86 | 1.71 | 1.68 |
| = ROE (average) | 23.03% | 17.25% | 2.64% |

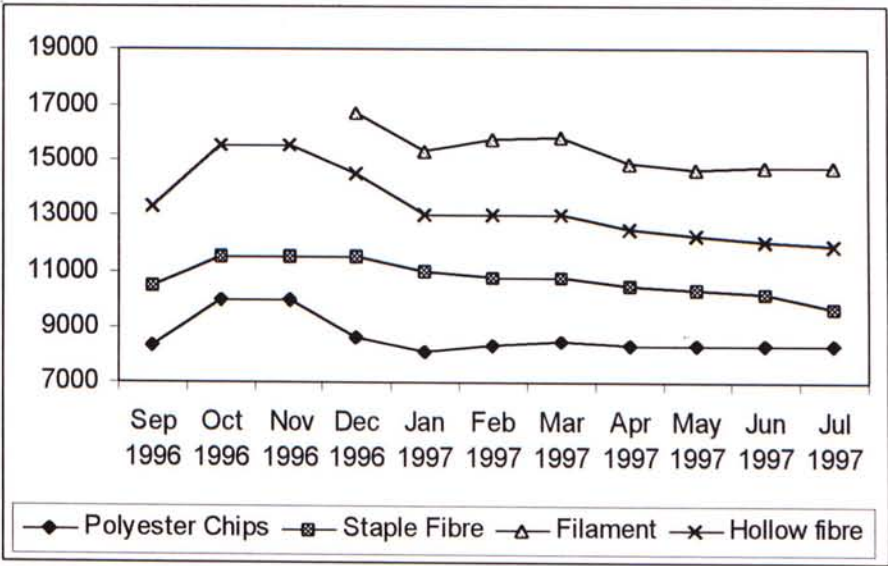
Source: Yizheng annual reports and Wardley Data Services Ltd.

In Table 16, we can notice that the performance of 3 petrochemical companies following similar industry trend in the past few years. Their performances were improved in 1995, except Yizheng, but were bad in 1996. One of the reasons was the over supply of petrochemical products in Asia. When comparing with that of other petrochemical companies, Yizheng performed the best in 1994, but the worst in 1996. Its earnings were less stable than other companies because Yizheng has less diversified products portfolio than others.

Yizheng mainly focus on four key products (polyester chips, staple fibre, filaments and hollow fibre) which targeted textile industries only. Moreover, the production of Yizheng is highly concentrated in only two less value-added products – polyester chips and staple fibre.

These two products in aggregate accounted for 96% and 92% of total production volume in 1995 and 1996 respectively. In Figure 8, we can find that the prices of these products changed at the same time.

Figure 8 – Yizheng product prices trend



Source: Hong Kong Economic Journal

Table 17 – The first 3 largest product categories of the 3 petrochemical companies in terms of % turnover in 1996

| Name of Companies | Product Category | % of Turnover (1996) |
|------------------------|---|----------------------|
| Jilin Chemical | Petroleum products | 41.3% |
| | Petrochemical & organic chemical products | 22.9% |
| | Dyestuff & dye intermediates | 10.6% |
| | Total: | 74.8% |
| Shanghai Petrochemical | Resins & Plastics | 31.8% |
| | Petroleum Products | 24.2% |
| | Synthetic Fibres | 24.1% |
| | Total: | 80.1% |
| Yizheng Chemical | Synthetic Fibres (include staple fibre, filament, hollow fibre) | 55% |
| | Synthetic Fibres materials (polyester chips) | 42% |
| | Others | 3% |
| | Total: | 100% |

Source: Yizheng annual reports and Wardley Data Services Ltd.

According to Ritter (1991)⁵, investors prefer companies with less fluctuation in earnings. Therefore, in the long run, strategies of Yizheng should be able to stabilize the earnings growth of the company. From the share price performance, the strategy of Yizheng to concentrate in one industry is not appropriate to increase its shareholders value.

Table 18 – Profit margins of Yizheng

| | 1993 | 1994 | 1995 | 1996 |
|-------------------------|--------|--------|--------|--------|
| Gross Profit Margin | 23.32% | 25.54% | 20.44% | 13.02% |
| Operating Profit Margin | 21.47% | 18.52% | 14.60% | 5.96% |
| Net Profit Margin | 13.82% | 15.73% | 13.04% | 3.11% |

Source: Yizheng annual reports

Moreover, in Table 15, we can find that the production capacities of Yizheng increase year by year. However, Table 18 shows that Yizheng could not achieve the expected economies of scale even in the most favourable year 1995.

Conclusively, by focusing on two less value-added products, Yizheng cannot achieve the expected economies of scale, and its earning is highly affected by the economy of these two products. Therefore, in the long run, Yizheng should produce more value-added products for various industries.

Lack of diversification in geographical market

The key markets of Yizheng are in the coastal area. Jiangsu and Zhejiang Provinces accounted for nearly 50% of sales in 1992. Moreover, the FCF group acquired in 1995 mainly focus in Guangdong region.

Table 19 – Geographical distribution of sales in the PRC in 1992 (% of sale volume)

| Areas | % of sales |
|------------------------|------------|
| Jiangsu | 35.5% |
| Zhejiang | 13.7% |
| Shanghai | 3.4% |
| Shandong | 2.9% |
| Anhui | 2.5% |
| Fujian | 2.1% |
| | 60.1% |
| Other areas of the PRC | 37.4% |
| Exports | 2.5% |
| | 100% |

Source: Yizheng 94 H-shares listing prospectus

Although many textile companies are located in coastal areas, this region is highly competitive, and highly affected by the dumping problems of Taiwan and South Korea competitors. Moreover, owing to over concentration in certain markets Yizheng would be also affected by other specific problems in these areas.

Therefore, Yizheng is recommended to sell its products to various provinces and cities, and to export its products to other countries. In 1996 and 1997, Yizheng established subsidiaries in different cities, including Hong Kong. Yizheng has implemented an appropriate distribution strategy, but the performance is still subject to further observation.

CHAPTER IV

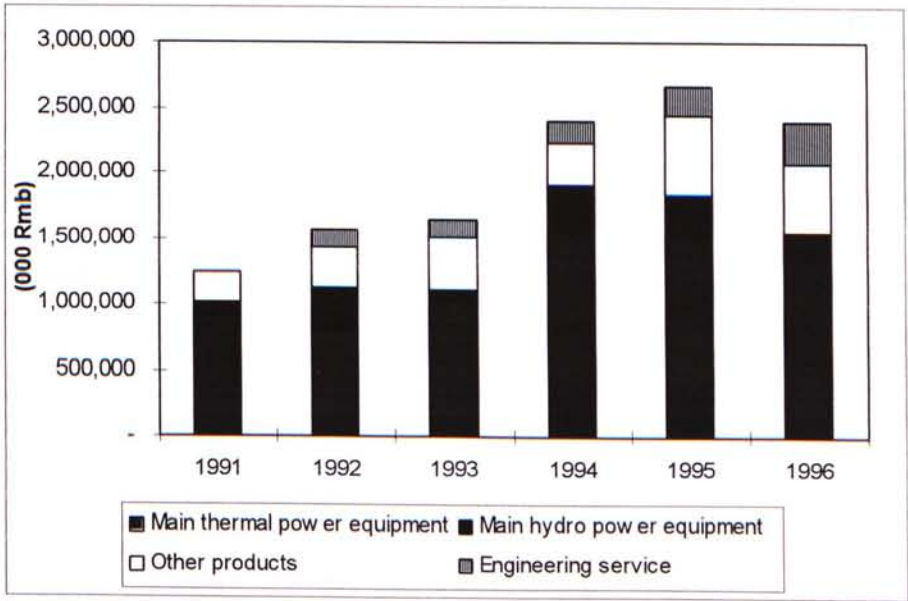
CASE STUDY: HARBIN POWER EQUIPMENT COMPANY LTD.

IV.1. Background

Harbin Power Equipment Company Limited (“HPEC”) (SEHK code: 1133) is the PRC leading manufacturer and exporter of power plant equipment. It was formed through the restructuring of Harbin Power Plant Equipment Group Corporation (“HPEGC”), which is the oldest large-scale power plant equipment manufacturer in PRC. It is located in Harbin, the PRC, known as the “City of Power.” As at the end of December 1996, the whole group of HPEC employed 26,609 people.

It provides a wide range of power equipment for both hydro and thermal power plants such as boilers, turbines, turbine generators and motors. It also provides engineering service for power plants and has a capability to manage a “turn-key project.” More than half of revenue comes from the sales of main thermal power equipment.

Figure 9 - HPEC turnover break down³¹



Source: HPEC 94 H-share prospectus and annual reports

³¹ 1991 to 1994 are prepared on combined basis as if the current group structure had been in existence.

History

In 1950s, three works of HPEGC, Harbin Generator Works, Harbin Boiler Works and Harbin Turbine Works, which were predecessors of the Group's three wholly owned subsidiaries, were established in Harbin, Heilongjiang Province under the administration of the Ministry of Machinery Industry of the PRC. Based on the technology imported from the former Soviet Union, HPEGC developed its own technology independently, improved the product quality, and expanded their production capacity until 1980s. Under the further technology advancement programs in the sixth and seventh Five-Year Plan, they made a 15-year technology transfer arrangement with ABB Combustion Engineering and Westinghouse Electric Corp in 1981. They have been the largest power equipment manufacturers in the PRC.

Listing

In December, 1994, HPEC listed its H-shares in the Stock Exchange of Hong Kong as the 15th H share company. Its international placement subscribed 10 times and H shares in Hong Kong was 1.4 times subscribed. The first trading day was December 16, 1994. The lead manager was S.G. Warburg which is SBC Warburg Dillion Read now. HPEC issued 435 million shares at RMB 2.84 which was HK\$ 2.58 with over-allotment option to S.G. Warburg. Market capitalization on March 18, 1998 was HK\$ 492.61 million (Bloomberg).

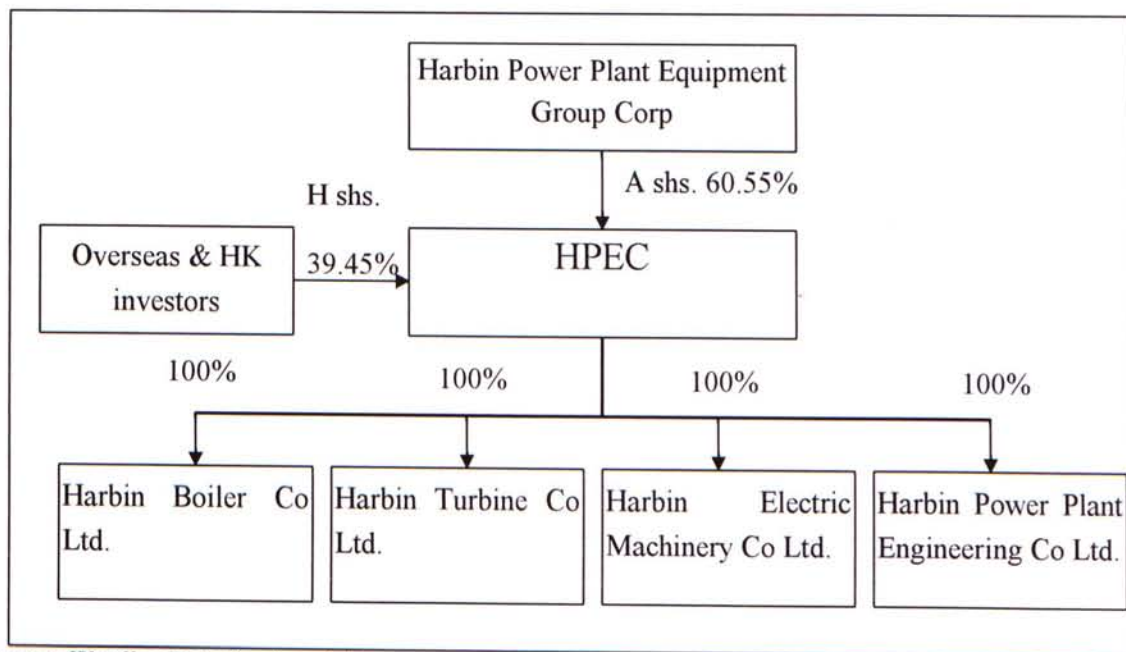
Table 20 - Share Placement

| Month/Year | Share Capital Changes | No. of Shares |
|------------|--|---------------|
| Dec. 1994 | Issued @ RMB 2.84 to ABB Asea Brown Boveri | 21,600,000 |
| | Placed @ RMB 2.84 internationally | 314,400,000 |
| | Offered @ RMB 2.84 to the public in HK | 72,000,000 |
| Jan. 1995 | Placed @ RMB 2.84 internationally to cover over-allotments | 34,151,000 |
| Total | | 469,151,000 |

Source: Wardley Data Services Ltd.

60.55% shares of HPEC are owned by HPEGC as A shares and the rest of them are owned by international investors including ABB as H shares. HPEC owns 100% interest of the four main subsidiaries: Harbin Boiler Co Ltd., Harbin Turbine Co Ltd., Harbin Electric Machinery Co Ltd., and Harbin Power Plant Engineering Co Ltd.

Figure 10 - Ownership Structure of HPEC



Source: Wardley Data Services Ltd.

Usage of proceeds of the H share offer were as follows:

Approximately HK\$817 million to HK\$930 million would be used for the construction of production facilities, the purchase of equipment, the development of new products, and the improvement of technologies,

Approximately HK\$160 million would be used to reduce the Group's borrowings, and the balance of approximately HK\$90 million would be used as additional working capital of HPEC.

The share performance index³² of HPEC has been under 100 most of the time after listing. It reached the highest of HK\$ 3.875 on August 26, 1997, when there was a booming HK market after the Hong Kong handover to the PRC. However, the price on January 13, 1998 was only 25.2% of the price on the first trading day.

Figure 11 – Relative Share Price Performance of HPEC (First trading day = 100)



Source: Datastream

IV.II. Agency Cost

IV.II.I. Management Structure

Through the analysis of board members career, some important directors also have positions in the PRC Government. For example, Li Gen-shen, chairman of the board of directors of HPEC and its group, has the positions in the Government such as deputy director in the State Defense Department, deputy secretary of Heilongjiang Party Committee, member of Party Central Committee and deputy head of Heilongjian Provincial People's Committee. This implies that there is a chance of the conflict between the stand point as chairman and the one as Government officer.

³² Share performance index is the relative price to the one on December 16, 1994 as 100.

Table 21 - Previous/Present Government Position of HPEC Directors

| Name | Government Position |
|---------------|--|
| Li Gen-shen | Deputy director in the State Defence Department Deputy Secretary of Heilongjiang Party Committee Member of Party Central Committee Deputy head of Heilongjian Provincial People's Committee |
| Pan Chong-yi | Head of Harbin's Light Industry Bureau |
| Hong Qi-peng | Member of Harbin Municipal People's Congress |
| Liang Wei-yan | Member of the PRC Society of Electrical Engineering Member of the PRC Society of Electrical Engineering Technology Assistant Director of the three Gorges Project Equipment Office under the Ministry of Machinery |
| Lu Yan-sun | Chairman of the PRC Society of Engineering Dynamics of the PRC Society of Mechanical Engineering Chairman of the PRC Association of Power Generation Equipment Manufacturing Industry |
| Zhang Yi-chen | Member of the Harbin Municipal Government Political Consultative Committee Member of the Specialist Consultative Committee of the Harbin Municipal Government |
| Yang Ying-liu | Member of National People's Congress Executive member of Harbin Municipal Political Consultation Committee |

Source: HPEC 94 H-share listing prospectus and annual reports

Table 22 – Management Structure of HPEC

| | Title | | | Age* | Nationality | Career in Government /Party | Academic Background | No. of years in HPEC* |
|-----------------|-------|------|------|------|-------------|--------------------------------|------------------------|-----------------------|
| | 1994 | | 1996 | | | | | |
| | 1994 | 1995 | 1996 | | | | | |
| Li Gen-shen | ED | ED | ED | 66 | Chinese | Yes | Engineering | 41 years |
| Pan Chong-yi | ED | ED | - | 51 | Chinese | Yes | Engineering | 29 years |
| Tian Yu-shi | - | - | ED | 57 | Chinese | No | Engineering | 32 years |
| Wang Wen-xiang | ED | ED | ED | 54 | Chinese | No | Engineering | 31 years |
| Wang Cun-na | ED | ED | ED | 60 | Chinese | No | Economics | 42 years |
| Hu Jian-qing | ED | ED | ED | 60 | Chinese | No | Engineering | 43 years |
| Xu Da-mao | ED | ED | ED | 61 | Chinese | No | Engineering | 36 years |
| Yuan Qi-hong | ED | ED | ED | 48 | Chinese | No | Engineering | 15 years |
| Geng Lei | ED | ED | ED | 49 | Chinese | No | Economics | 29 years |
| Lao Da-qian | ED | ED | ED | 61 | Chinese | No | Engineering | 42 years |
| Liu Jie | ED | ED | ED | 58 | Chinese | No | Engineering | 35 years |
| Hong Qi-peng | NED | NED | NED | 58 | Chinese | Yes | Engineering | 35 years |
| Liang Wei-yan | NED | NED | NED | 67 | Chinese | Yes | Engineering | 46 years |
| Zhang Zhuo-yuan | NED | NED | NED | 64 | Chinese | No | Economics | n.a. |
| Lu Yan-sun | NED | NED | NED | 62 | Chinese | Yes | Engineering | 43 years |
| Zhang Yi-chen | NED | NED | NED | 33 | Chinese | Yes | Engineering | n.a. |
| Li Duan-yi | SV | SV | SV | 61 | Chinese | No | Economics | 46 years |
| Wang Qing-hua | SV | SV | SV | 56 | Chinese | Military | Politics | 9 years |
| Chen Zhong-hua | SV | SV | SV | 52 | Chinese | No | Economics | 29 years |
| Yang Yi-de | SV | SV | SV | 59 | Chinese | No | Engineering | 35 years |
| Yang Ying-liu | SV | SV | SV | 57 | Chinese | Yes | Engineering | 40 years |

Note: C: Chairman of the Board, VC: Vice Chairman of the Board, ED: Executive Director, NED: Non-executive Director, SV: Supervisor

Source: HPEC 94 H-share listing prospectus and annual reports

* - data in 1996

IV.II.II. Remuneration

There is no correlation between the growth of directors' and supervisors' remuneration and the earnings growth of HPEC. Directors' and supervisors' remuneration has increased in last two years. On the other hand, EPS growth dramatically decreased in last two years. Therefore, HPEC does not have incentive system for management and has more possibility of conflict of interest between principal and agent.

Table 23 – Remuneration & Bonus of management in HPEC (Unit: RMB)

| | Directors' fee (RMB) | Other Emoluments (ED & SV) Salaries and other benefits (RMB) | Pension Contributions (RMB) | Total (RMB) | Growth | EPS Growth |
|------|-------------------------|--|-----------------------------------|----------------|--------|---------------|
| 1994 | 270,000 | 81,000 | 53,000 | 404,000 | | |
| 1995 | 271,000 | 91,000 | 54,000 | 416,000 | 3.0% | -56.9% |
| 1996 | 321,000 | 101,000 | 37,000 | 459,000 | 10.3% | -31.1% |

Source: HPEC annual reports

IV.II.III. Management Ownership

According to annual reports, none of the directors or supervisors had any interest in any shares or debentures of the HPEC or any of its associated companies. This may cause less incentive for directors to increase EPS and shareholders value.

IV.III. Government Regulation

IV.III.I. Product and Raw Material Price

The PRC Government still has power on the industry in several kinds of way. The power equipment industry is a protected industry from foreign competitors. The Government prohibits 100% foreign-owned companies at this moment. Obviously, a restricted competition exists in this industry. According to the prospectus, there is also a price regulation. HPEC needs an approval from the State Price Control Bureau in order to increase their product price. HPEC also has "Price compensation" upon approval by the State Price Control Bureau (SPCB). The amount of price compensation is determined by the increase of the costs of producing the goods sold due to the changes in the PRC Government policies. It is also

necessary for HPEC to have an approval for production capacity expansion. It seems that HPEC's profitability and future growth are significantly affected by the PRC Government.

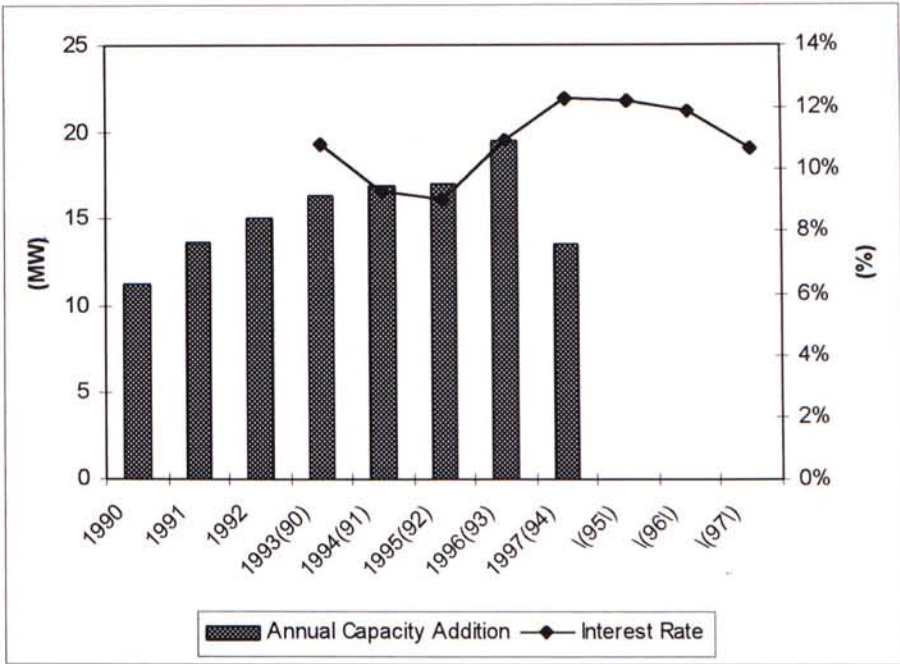
IV.III.II. Taxation

HPEC taxable income is subject to an income tax rate of 15% pursuant to the Notice on Certain Preferential Income Tax Policies issued by the PRC Ministry of Finance and the State Tax Bureau on March 29, 1994. According to the Provisional Regulations of the People's Republic of China concerning Income Tax on Enterprises, all joint stock enterprises are required to pay enterprise income tax at the rate of 33 % unless they are exempted or alleviated by other regulation. Therefore, 18 % of HPEC profit depends on the Government policy.

IV.III.III. Monetary Policy

The Government can affect the industry in an indirect way such as monetary policy, because interest rate and money supply are related with the huge investment in power plants. After the Government austerity program, credit crunch from 1993 delayed the development of power plants. This was coincided with a decline in World and Asian Development Bank soft loans to the PRC power industry. These things resulted in the decrease of the turnover of HPEC. The following analysis suggests the negative correlation between interest rate and power equipment industry. We analyzed the data of annual capacity increase and three-year loan interest rate. Because it takes 18 to 30 months to finish building power equipment, the interest rate is shifted for 3 years forward. In the following graph, it is observed that the decrease of interest in 1991 and 1992 affected the increase of annual capacity addition in 1994, 1995 and 1996.

Figure 12 - Capacity Addition and Interest Rate



Source: Datastream and China Statistic Yearbook

In 1996, the PRC Government intended to utilize part of foreign exchange reserve to purchase power-generating facilities manufactured in the PRC for establishing power generating stations. This new measure will secure the availability of funds for the construction of power generating stations and for the procurement of power generating equipment. This results in the development of the power equipment industry.

The Government can even have a power on the projects abroad, because it can give a conditional Government loan to foreign projects. For example, the PRC granted a \$180 million suppliers' credit to Philippines' Magellan Utilities Development Corp for the contract with the PRC Shanghai Electric Corp in November 1996.

The Government has to protect its people's interest. In other words, the Government does not want to increase electricity price. Higher power equipment cost will affect the initial investment of power plant, which causes higher electricity price. Therefore, there is a

possibility that the interests of company and Government are different from each other. And the Government still controls the industry in many ways.

IV.IV. Asymmetric Information

IV.IV.I. Analyst Coverage

Equity analysts play a role to decrease the information gap between directors and outside investors. The analysts who cover HPEC are 18 professionals from 16 investment banks according to Bloomberg. No US-base investment bank analyst is on the list of the HPEC analyst coverage.

IV.IV.II. Investment of Institutional Investors

HPEC made a special placement of 21.6 million H shares to ABB in December, 1994. This is positive information to investors because they may have a confidence on the company. This may also decrease asymmetric information because the institutional investors can access to more information.

Table 24 - Strategic Investors of HPEC

| Investor | No. of shares owned in December, 1994 (m) | % of H shares |
|-------------------------|--|---------------|
| Asea Brown Boveri (ABB) | 21.6 | 4.6% |

Table 25 - List of Principal Subsidiaries & Associated Companies

| Name | Group's interest | Activity |
|--|------------------|--|
| Harbin Boiler Co. Ltd. | 100% | Manufacturing of boilers |
| Harbin Electrical Machinery Co. Ltd. | 100% | Mfg of stream turbine generators sets & hydro turbine generator sets |
| Harbin Power Engineering Co. Ltd. | 100% | Provision of engineering services for power stations |
| Harbin Turbine Co. Ltd. | 100% | Manufacturing of stream turbines |
| Harbin Power Technology Trading Co. Ltd. | 100% | Trading |
| Harbin Power Property Development Co. Ltd. | 100% | Property development |

Source: Wardley Data Services Ltd.

IV.IV.III. Information disclosure

HPEC releases its annual reports and interim every year. HPEC does not clearly state the reason why HPEC set up a property development subsidiary, which are fully owned by HPEC, in the section of “Overview of the company” and “Management Discussion and Analysis” of its annual report. The following is the list of principal subsidiaries and associated companies. Even though they put this list in “Notes to the Financial Statements,” only first four companies are stated clearly in the sections above, which may get more attentions. It may be difficult for investors to understand the reason that HPEC has a property development company as a subsidiary.

IV.V. Industry

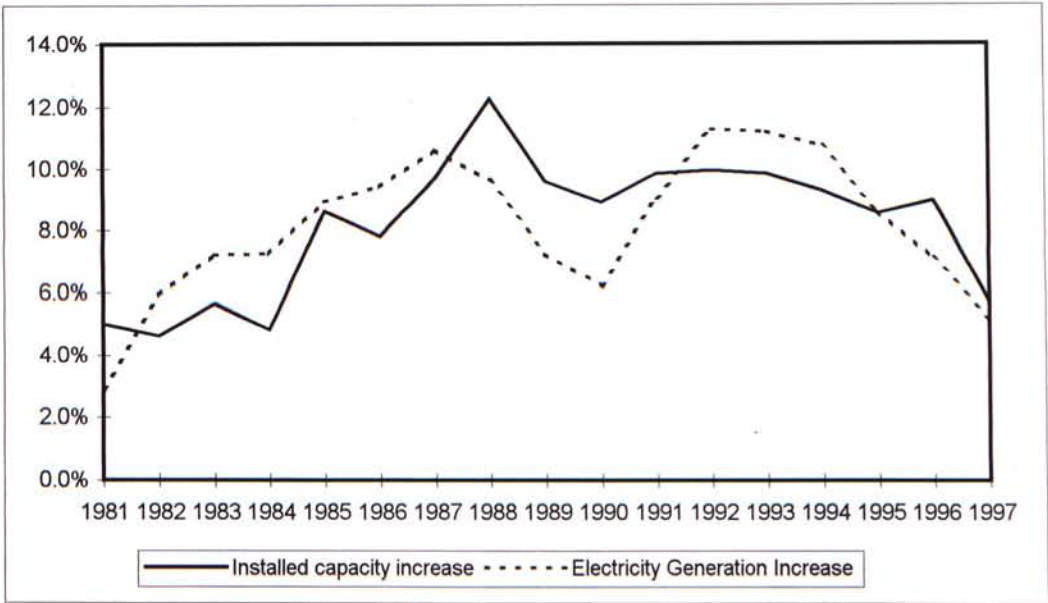
IV.V.I. Industry Growth

Power equipment industry has developed very fast at around 10% annual growth during late 1980s and early 1990s. Electricity supply was one of important factor to sustain high economic growth, so PRC Government has committed to the development of power plants in a long run. The PRC is also a developing country in terms of per capita electricity consumption. Per capita electricity consumption of PRC in 1992 was 631 KWh, which was only one-eleventh of Japan³³. Obviously this industry has a lot of potential for substantial future development.

However, the industry growth became lower after 1994 because of the PRC austerity policy stating from 1993. Because of the policy, most of the PRC companies had a problem in financing. For example, interest rate of one to three year loan went up to 12.24% from 9% in July, 1993. Projects of establishing power generators were also affected. Companies had to postpone or scale down their projects. This resulted in the slow growth of power equipment

companies. The installed capacity increase in 1997 was 5.7%, which is less than half of the highest growth of 12.2% in 1988.

Figure 13 - Annual Increase of Electricity Demand & Supply



Source: China Statistics Yearbook

IV.V.II. Porter Five’s Forces Analysis – Power Equipment Industry in the PRC

Rivalry Determinant

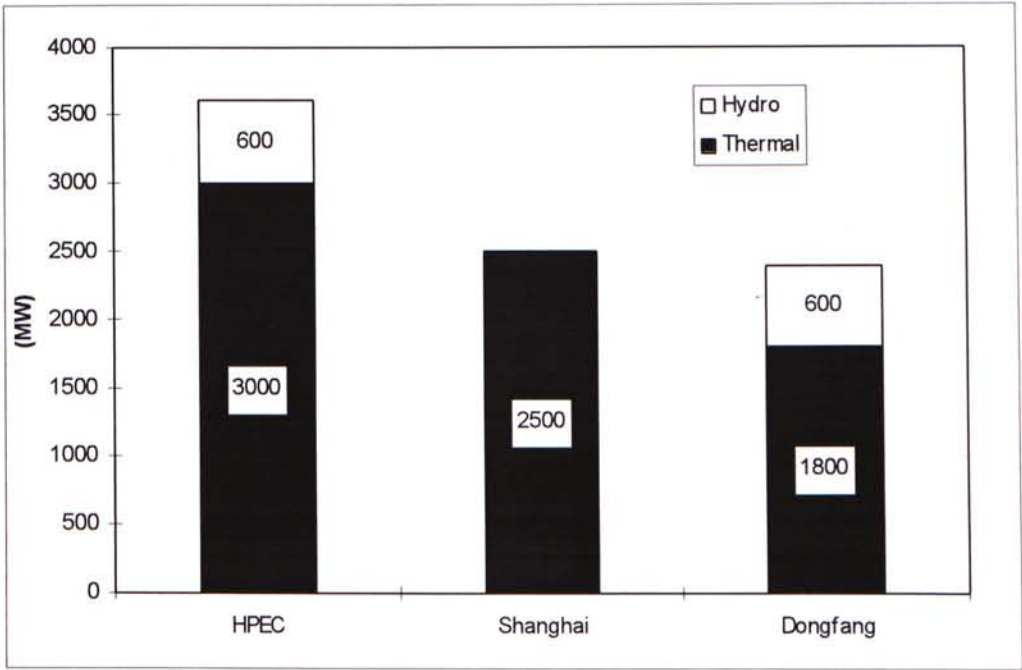
The threat from competitors is not significant because the power equipment industry is a regulated industry in which a fully foreign-owned company is prohibited. Although foreign companies can export their products, they are approved case by case and are charged tariffs, too.

Major domestic competitors are Dongfang Electric Machinery, which is also H-share company, and Shanghai Electric Corporation which is planning to list in Hong Kong Stock Exchange. These three companies together accounted for over 73% of total hydro and thermal power plant equipment production in the PRC in 1993, one year before HPEC listing. Dongfang provides the equipment for both hydro power plants, which contributes around

³³ HPEC 94 H-share listing prospectus

20% of electricity generation in PRC, and thermal equipment. HPEC has the largest production capacity both hydro and thermal power equipment. Shanghai sells only thermal power equipment.

Figure 14 - Comparison of Designed Production Capacity in 1993



Source: HEPC 94 H-share listing prospectus

From the data of electricity generation, thermal power plants account for about 80% which means thermal power equipment industry is larger markets than hydro power equipment. Therefore, HPEC has a better position in the industry.

Entry Barriers Determinant

There is small possibility to have threat from new entrants at this moment. The power equipment industry is a protected and high entry-barrier industry. The entry barriers are observed to be the Government regulation, large initial investment, and technology requirement. Foreign companies can only enter this industry by forming joint ventures with PRC partners. Not many PRC companies can afford to invest large amount money and to have such high technology.

Table 26 - Total Energy Available for Consumption (Billion kWh)

| | Electricity Generation | | | | Share | | |
|------|------------------------|--------|---------|---------|-------|---------|---------|
| | Total | Hydro | Thermal | Nuclear | Hydro | Thermal | Nuclear |
| 1980 | 300.63 | 58.21 | 242.42 | | 19.4% | 80.6% | 0.0% |
| 1985 | 410.69 | 92.37 | 318.32 | | 22.5% | 77.5% | 0.0% |
| 1986 | 449.53 | 94.53 | 355 | | 21.0% | 79.0% | 0.0% |
| 1987 | 497.27 | 100.01 | 397.26 | | 20.1% | 79.9% | 0.0% |
| 1988 | 545.21 | 109.15 | 436.06 | | 20.0% | 80.0% | 0.0% |
| 1989 | 584.81 | 118.39 | 466.42 | | 20.2% | 79.8% | 0.0% |
| 1990 | 621.2 | 126.72 | 494.48 | | 20.4% | 79.6% | 0.0% |
| 1991 | 677.55 | 125.09 | 552.46 | | 18.5% | 81.5% | 0.0% |
| 1992 | 753.94 | 132.47 | 621.47 | | 17.6% | 82.4% | 0.0% |
| 1993 | 838.26 | 154.38 | 683.88 | | 18.4% | 81.6% | 0.0% |
| 1994 | 928.08 | 182.16 | 745.92 | | 19.6% | 80.4% | 0.0% |
| 1995 | 1007.73 | 190.58 | 804.32 | 12.83 | 18.9% | 79.8% | 1.3% |

Source: China Statistics Yearbook

Substitute Determinant

Nuclear Power Equipment will be the only major possible substitute at this moment. In the Ninth Five-Year Plan (1996-2000), the PRC planned to expand its nuclear power program rapidly, through imports of foreign equipment and technology as well as increased reliance on domestic power equipment³⁴. Most probably nuclear generators will have a threat to this company in a long run. The PRC has difficulty to find the funds to pay for the nuclear plants, so foreign providers may come with more attractive financing packages. In developed countries, nuclear power is an important and non-polluted energy source. Because environmental issue is serious in the PRC, Government must seriously consider the potential of nuclear power plants. Therefore, threat from new technology and more competitive foreign companies will be high to HPEC.

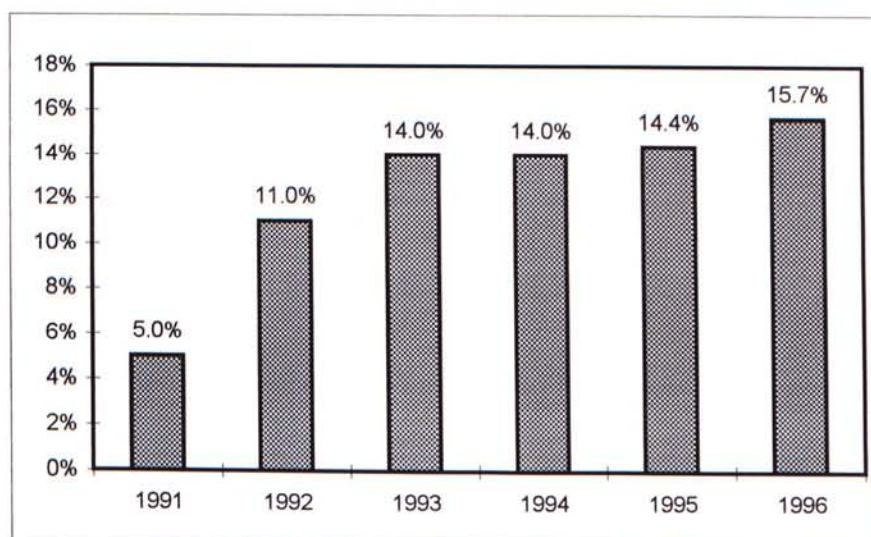
Buyer Power Determinant

³⁴ Richard P. Suttmeier and Peter C. Evans, "China Goes Nuclear", The China Business Review (September-October, 1996)

There are two main types of buyers: domestic and foreign buyers, which are mainly power generators. Other customers include petrochemical and metallurgical companies. Foreign buyers are mainly from the developing countries, which have more potential of power plants development. HPEC had contracts in Pakistan, Korea, Philippines, Vietnam, Albania, Congo, Canada, US, Turkey, Venezuela, Malaysia, and Iran before. In these countries, HPEC has to compete with international players. Buyers must have more power in this situation because there are more power equipment companies than buyers.

Because of Government control in the PRC domestic market, there is little negotiation between buyers and HPEC. HPEC has "Price compensation" upon approval by the State Price Control Bureau ("SPCB"). The amount of price compensation is determined by the increase of the costs of producing the goods sold due to the changes in the PRC Government policies. The amount of price compensation was RMB 158.325 million in 1995 and RMB 89.788 million in 1996, which were 6.48% and 4.31% of total turnover respectively. More surprisingly, the HPEC group profit was RMB 122.087 million in 1995 and RMB 84.532 million in 1996. Price compensation was more than HPEC profit obviously.

Figure 15 - Revenue from Foreign Countries³⁵



Source: HPEC annual reports

Supplier Power Determinant

Suppliers for the power equipment industry are mainly steel manufacturers and technology partners. According to HPEC's prospectus, 45 - 51% of total raw material consumption is steel, so steel manufacturers are important suppliers to HPEC. Because domestic steel demand exceeds its supply, a shortage of supply may affect the production of HPEC. HPEC group's requirement was guaranteed under State Plans in 1994. However, there is no certainty that the extent of such guarantee would be maintained every year. HPEC also relies on imported raw materials. About 30% of raw materials are imported through China Metal & Minerals Import & Export Corporation. Therefore, under the present PRC system, HPEC enjoys high profitability under the Government favorable policy.

ABB Combustion Engineering (ABBCE) and Westinghouse Electric Corporation Limited (WEC) are the technology partners. ABBCE provides the technology about thermal power equipment and WEC gives the one for hydropower equipment. Technology partners may not have much threat because many foreign companies want to form a partnership with PRC companies in order to obtain a stake of PRC infrastructure development. ABBCE obtained 21.6 million H shares which was 4.6% of total H share issue.

Conclusion

As a conclusion, HPEC does not have much threat from these five forces because there is not serious competition in PRC domestic market. PRC power equipment industry is oligopolistic. There is a government control in both buyer side and supplier side. In the long run the threat from substitute will be larger because the thermal and hydro power equipment market will decrease. In terms of new entrants, this really depends on the Government regulation to allow foreign companies to enter PRC markets. On the other hand, the international market is very different from the domestic market. In the international market, HPEC has to compete with

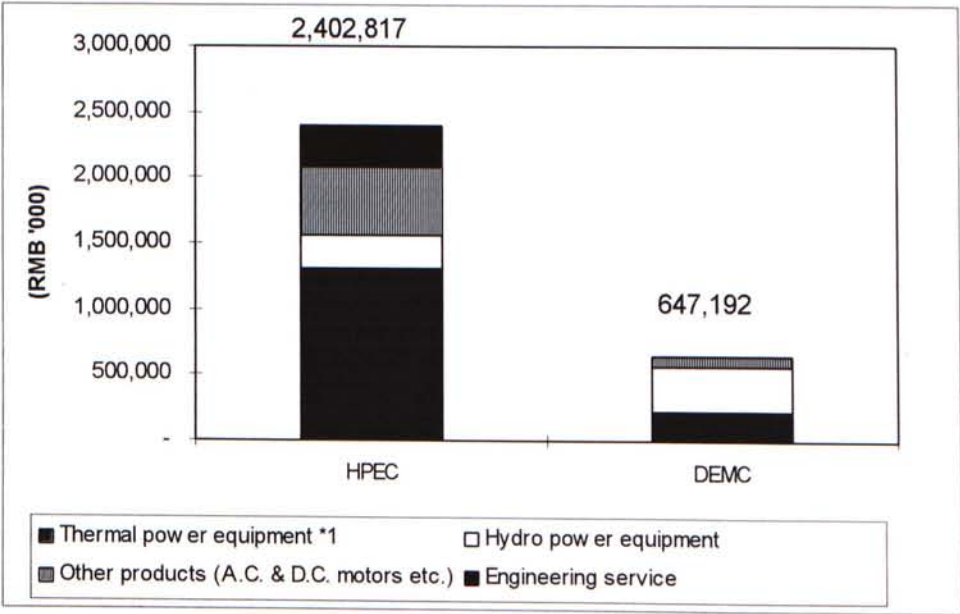
³⁵ 1994 figure was prepared by S.G. Warburg

international players from US, Japan and Europe. In these markets, HPEC profit margin will be same as international standard or even lower than it because it has to compete with more advanced-technology competitors.

IV.VI. Strategy

HEPC strategy is “Diversification” compared with its key competitor Dongfang Electrical Machinery Company Limited (“DEMC”) (SEHK Code: 1072). HEPC provides wider range of products and services. DEMC focuses on hydropower equipment and manufactures only steam turbine generators in thermal power equipment. It does not provide engineering services, which is lower profitability than other products.

Figure 16 - Comparison of Business Portfolio (1996 data)³⁶



Source: HPEC Annual reports

HPEC’s profitability is more than 20 % in thermal and hydropower equipment, however the profitability of engineering service is only 13.5 %. DEMC profitability is higher than HPEC even though it made loss in other products such as AC and DC motors. This implies that

³⁶ DEMC manufactures steam turbine generators only.

DEMC concentrates only the profitable products, on the other hand, HPEC provides full range products and services.

In terms of strategic focuses, HPEC mainly focuses on the following three areas: international business development, R&D enhancement, and quality control. Because the PRC domestic market has been unfavorable, HPEC has put more effort on the development of foreign markets in Southeast Asia and Middle East developing countries. With cooperation of the PRC Government, HPEC successfully developed international clients and the turnover from abroad accounts for around 15.7% in 1996. This strategy has been taken by DEMC, too. DEMC's marketing mission is "Developing both domestic and overseas markets and markets of different scales and not overlooking repairs and maintenance."³⁷

Table 27 - Comparison of Operating Profit Margin (1996 data)

| | HPEC | DEMC |
|--|-------|-------|
| Thermal power equipment | 24.9% | 51.2% |
| Hydro power equipment | 20.0% | 27.0% |
| Other products (A.C. & D.C. motors etc.) | 28.5% | -8.0% |
| Engineering service | 13.5% | |
| Total | 23.7% | 31.2% |

Source: HPEC annual reports

About technology alliance, HPEC signed a technology transfer agreement with ABBCE and Westinghouse Electric Corp Ltd. in 1980s. This strategic alliance does not really differentiate HPEC from other competitors. DEMC also teamed up with Hitachi to manufacture steam turbine generators. Through its internal operational review, HPEC tries to upgrade product quality and professional project management. It has committed in quality control because it is one of the important criteria to win contracts. In fact, it has already obtained ISO 9001 standards which guaranteed its level of quality internationally.

³⁷ DEMC annual reports

The result of their strategic difference obviously appears in Return on Equity (ROE). DEMC enjoys higher ROE as a result of higher net profit margin, although financial leverage of HPEC is higher than that of DEMC. In terms of profitability, HPEC strategy is not regarded as better strategy than that of DEMC.

Table 28 - Comparison of ROE Decomposition

| | HPEC | | DEMC | |
|------------------------|------|------|-------|------|
| | 1995 | 1996 | 1995 | 1996 |
| ROE (%) | 4.5% | 3.0% | 8.6% | 4.8% |
| Net profit margin (%) | 4.6% | 3.5% | 15.3% | 8.8% |
| Asset turnover (X) | 0.34 | 0.31 | 0.33 | 0.33 |
| Financial leverage (X) | 2.88 | 2.78 | 1.68 | 1.69 |

Source: HPEC and DEMC annual reports

CHAPTER V

DISCUSSION AND CONCLUSION

By comparing the two cases of Yizheng and HPEC, we find some notable difference, which may possibly affect their share price performance. We will compare both companies in terms of the criteria such as agency cost, Government control, asymmetric information, industry and strategy.

V.I. Agency Cost

The three elements in agency cost are management structure, remuneration and management ownership. In both companies, the chairman of the board has an important position of government entities. They do not have Hong Kong resident non-executive directors. Concerning remuneration, increase of bonus and salary is not correlated with the increase of earnings per share ("EPS"). Although EPS growth in both companies were negative in last two years, the directors' remuneration continued to be increased. These two evidence are very important because these may cause the conflict of interest between principals and agency. However, these are not the difference between two the best and worst performing companies.

Management ownership of Yizheng is different from that of HPEC. Even though management ownership of Yizheng directors is small, they have a stake of Yizheng. On the other hand, none of the directors or supervisors has any interest in any shares or debentures of the HPEC or any of its associated companies. Therefore, incentive system by share ownership should be considered as a factor to increase share price performance.

V.II. Government Control

The PRC Government control polyester and power equipment industries in many ways such as price control, taxation, import custom, money supply, business diversification, financing and, decisions on mergers and acquisitions.

Price control is stronger in power equipment industry than polyester industry because of the deregulation of raw material price and polyester fibre price. We believe that higher power equipment cost highly affects the initial investment of power plant, which causes higher electricity price. Power equipment industry is more related to the infrastructure of the economy and thus more Government controls to protect the residents' interest rather than the shareholders' interest. On the other hand, there is an evidence that the Government can affect polyester fibre price indirectly through import tariff, taxation etc.

In terms of financing, Yizheng H-share price decreased after the announcement of new issuance of H-share on March 16, 1995 instead of A-shares. The Government influence on this matter was reasoned to protect the domestic market and to ignore H-share investors' price risk caused by sudden increase in the supply of H-shares.

As a conclusion, the Government has been affecting both industries directly and indirectly for the national interest. The extent of government control is identical in both industries.

V.III. Asymmetric Information

There is no obvious difference of information disclosure between two companies. Both companies have to follow the regulation both in Hong Kong and in the PRC. We find HPEC hesitance to disclose its property development subsidiary. Managing director of Yizheng also tried to hide a bad news about the drop of profit margin. The hidden action problem (Hillier (1997)) is observed in both Yizheng and HPEC.

Analyst coverage, which decreases the information gap between directors and outside investors, is significantly different. Only 18 analysts from 16 investment banks cover HPEC, while 35 analysts from 25 investment banks cover Yizheng. We can expect that the

information of Yizheng is more available than HPEC that obtains more confidence from investors.

V.IV. Industry

Power equipment industry is more protected and less pressure from five forces than polyester industry. HPEC profitability is more secured by the Government. In the other words, it is easily controlled by the PRC Government. HPEC financial result has been heavily affected by the Government austerity program in the last three years. On the other hand, the pressure from rivalry in the industry is largest in the five forces because the polyester market has no price control. The polyester fibre price is determined by the aggregate demand and supply of the market. When Yizheng was listed in 1994, the industry was in upward trend. Then, Yizheng share performance was good in the first year. As a conclusion, we regard industry growth is an important factor of share price performance.

V.V. Strategy

Strategy is a significant factor to decide whether the company can outperform the other competitors in the industry. After our evaluation, we conclude that HPEC strategy is not competitive enough when comparing with the other competitor, DEMC. On the other hand, Yizheng has not had a diversified product portfolio. Although it outperformed the competitors in terms of ROE in 1994 because the industry was in the uptrend, Yizheng underperformed its competitors when the industry was going down.

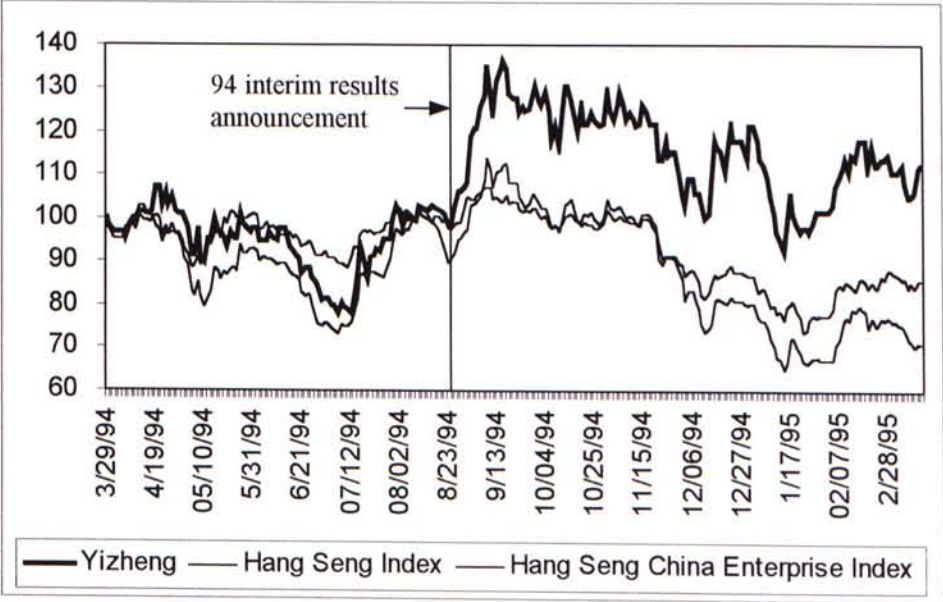
V.VI. Explanations for the first year price performance of Yizheng and HPEC

Figure 17 shows the general trend of 1st year share price performance of Yizheng. We can analyze the price changes into 3 phases:

- After listing, the share price of Yizheng generally moved in line with Hang Seng Chinese Enterprise Index. It meant that the market expected Yizheng should perform in line with other H-share companies.

- On August 25, 1994, Yizheng announced its 1994 interim result, which was 2.8 times better than that in similar period in 1993. This good result was out of the expectation of the market and mainly due to the large decrease of exchange loss and the actual production volume greater than the rated capacity. Then the share price increased 32% within less than one month where the market only increased by 5.6%.
- Afterwards, the share price of Yizheng moved in line with the market but outperformed the Hang Seng Chinese Enterprise Index (Table 29). This was mainly due to the expected shortage of cotton in the PRC. Since Yizheng mainly produced polyester fibre, the expected higher fibre price should increase the revenue of Yizheng.

Figure 17 – 250 trading days share price performance of Yizheng



(Relative value on the first trading day = 100)

Source: Datastream

Table 29 – Yizheng Share price on 9/15/94 and 3/14/95³⁸

| Date | Yizheng | Hang Seng Index | Hang Seng China Enterprise Index |
|---------|---------|-----------------|----------------------------------|
| 15/9/94 | 3.24 | 9862.64 | 1492.51 |
| 14/3/95 | 2.67 | 8094.58 | 949.34 |

³⁸ 9/15/94 – Highest price after 1994 interim result; 3/14/95 – the last day of 250 time frame

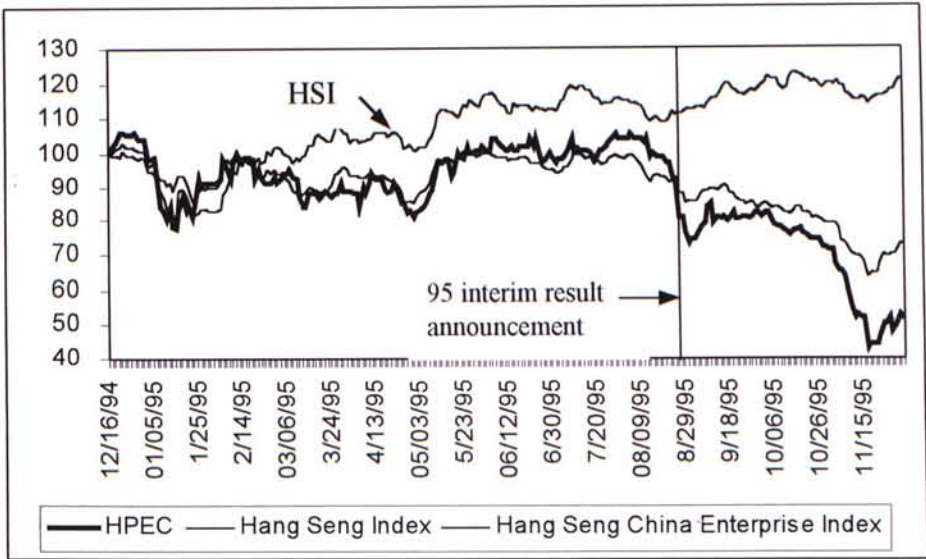
| Change (%) | 17.59% | 17.93% | 36.39% |
|------------|--------|--------|--------|
|------------|--------|--------|--------|

Source: Datastream

Figure 18 shows the 1st year price trend of HPEC after its H-shares listing at the end of 1994. The analysis can be divided into 3 stages:

- After listing, the share price of HPEC moved in-line with Hang Seng Chinese Enterprise Index. However, both the lines were well below that of Hang Seng Index because the market worried about the adverse impact of austerity programme of the PRC on those H-share companies.
- From the highest point of the share price of HPEC on August 4, 95, the share price dropped continuously to at most 30%. It was out of the expectation of the market, and was mainly due to the drop of the 1995 interim earnings comparing with that in last year, without previous warnings from the management. While within the same period, revenues of competitor – DFEM was also dropped by 26%. (Table 30)
- In the late 1995, as the austerity programme of the PRC proceeded, both the share price of HPEC and Hang Seng Chinese Enterprise Index dropped. HPEC share price performed worse than the benchmark index because of the revised whole year earnings forecast by equity analysts.

Figure 18 - 250 trading days share price performance of HPEC
(Relative value on the first trading day = 100)



Source: Datastream

Table 30 – HPEC share price on 4/8/95 and 30/8/95³⁹

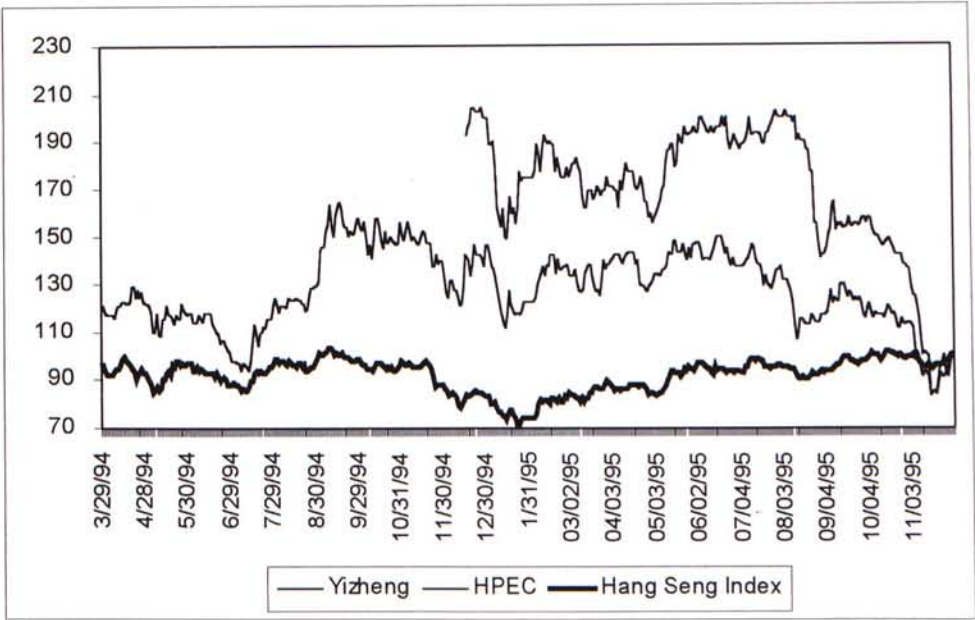
| Date | Yizheng | Hang Seng Index | Hang Seng China Enterprise Index |
|------------|---------|-----------------|----------------------------------|
| 4/8/95 | 2.63 | 9362.83 | 1075.45 |
| 30/8/95 | 1.83 | 9197.21 | 927.49 |
| Change (%) | -30.42% | -1.77% | -13.76% |

Source: Datastream

From above analysis, we can conclude that in their first trading years, the share prices of these two H-share companies were heavily affected by their corresponding industries and specific strategies. Moreover, from Figure 19, we could find that the share price of both companies were affected by austerity programme (Government intervention) and were dropped until the last day of our time frame. Even though the 1995 interim earnings of Yizheng increased 82% from that in 1994, its share price also dropped in line with Hang Seng Chinese Enterprise Index. However, as these two companies are in different industries, their share price performances were different.

³⁹ 4/8/95 – highest price after listing; 30/8/95 – lowest price after 1995 interim result announcement

Figure 19 – Comparison performance of Yizheng and HPEC⁴⁰
(Relative value on the last trading day in this time frame = 100)



Source: Datastream

V.VII. Conclusion

After comparing the ‘best’ and the ‘worst’ performing H-share companies, we find the following factors affecting the share price performance the most:

- Incentive system – ownership structure
- Analyst coverage
- Industry
- Strategy

Most SOEs in the PRC have a problem in its incentive system. Directors are not really motivated to increase profits of the companies because their emolument is not linked with the performance of the companies. As a result, the shareholder values of these companies are also affected. Therefore, H share companies are encouraged to upgrade their incentive system of

⁴⁰ If the share price is higher than the last trading day, it means that the share price is dropping.

directors by means of stock ownership by directors, EPS linked bonus, and stock option although there is still legal problems to complete the system.

Equity analysts play an important role of information disclosure in H-share companies because the information of PRC companies and the PRC market is less attainable. In the short run, the H share companies cannot control whether brokerage houses cover them or not. However, the companies can decrease asymmetric information problem by enhancing investors' relations. They can have investors' relation department, hold more analysts meetings, publish monthly journal for investors, etc.

Industry and strategy factor for H-share companies together are as important as for companies in other foreign markets because these are the basic elements in equity valuation. Industry factor is hard to be controlled by the companies. Strategic recommendation should be different from company to company. The most feasible recommendation to H share companies is a diversification of business portfolio in order to reduce industry risk. Especially, the PRC intends to grow world class conglomerates by the beginning of the next century.

Appendix I - List of Capital Raising of H-shares companies (up to 31st December 1997)

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ ⁴¹ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|--------------------|-------------------|--------|---|------------------------------------|--------------------------|-----|------|---|
| 347 | Angang New Steel | HKSE, SZSE | Jun-97 | H: Public offering in HK H: Int'l placing | 89.00 801.00 | 1.63 1.63 | | | 145.07 1,305.63 |
| | | | Nov-97 | A: Public offerings A: Employees offerings | 285.51 14.49 | 3.9 3.9 | | | |
| 914 | Anhui Conch | HKSE | Oct-97 | H: Int'l placing H: Public offering in HK | 306.85 54.15 | 2.28 2.28 | | | 699.62 123.46 |
| 995 | Anhui Expressway | HKSE | Nov-96 | H: Public offering in HK H: Int'l placing | 73.95 419.06 | 1.77 1.77 | | | 130.89 741.74 |
| 991 | Beijing Datang | HKSE, LSE | Mar-97 | H: Public offering in HK H: Int'l placing H: Placed to New World Infrastructure | 281.41 656.61 492.65 | 2.52 2.52 2.52 | | | 709.15 1,654.67 1,241.47 |
| 588 | Beijing North Star | HKSE | May-97 | H: Placed to various investors H: Placed to New World Dev. (China) H: Public offering in HK H: Over-allotment exercised by HSBC Inv. Bank Asia | 351.48 171.10 92.22 92.22 | 2.4 2.4 2.4 2.4 | | | 843.55 410.64 221.33 221.33 |

⁴¹ 1 US = 7.8 HK\$

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|---|-------------------|------------------|---|--|--|-----|------|--|
| 325 | Beijing Yanhua | HKSE, ADSs | Jun-97 | H: Public offering in HK H: Int'l offering | 144.21 867.79 | 1.76 1.76 | | | 253.81 1,527.31 |
| 187 | Beiren Printing Machinery | HKSE, SSE | Aug-93 May-94 | H: Public offering in HK A: Public offerings | 100.00 50.00 | 2.08 | 5.3 | | 208.00 - |
| 161 | CATIC Shenzhen Holdings | HKSE | Sep-97 | H: Int'l placing H: Public offering in HK H: Placed to Cheung Kong (Holdings) Ltd. H: Placed to Shum Yip Inv. H: Placed to The Bank of East Asia Ltd. H: Placed to United Overseas Capital Ltd. | 166.10 33.00 11.00 5.50 2.20 2.20 | 1.73 1.73 1.73 1.73 1.73 1.73 | | | 287.35 57.09 19.03 9.52 3.81 3.81 |
| 1202 | Chengdu Telecommunications Cable Co. | HKSE | Dec-94 | H: Int'l placing H: Public offering in HK | 80.00 80.00 | 2.8 2.8 | | | 224.00 224.00 |
| 670 | China Eastern Airlines Corporation | HKSE, ADS, SSE | Feb-97 | H: Public offering in HK H: Int'l offering H: Over allotment A: Public offerings A: Offerings to employees | 483.00 917.00 166.95 270.00 30.00 | 1.38 1.38 1.39 2.45 2.45 | | | 666.54 1,265.46 232.06 - - |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|------------------------------------|-------------------|--------|--|----------------------|------|-----|-------|---|
| 1055 | China Southern Airlines | HKSE, ADSS | Jul-97 | H: Public offering in HK | 71.00 | 4.7 | | | 333.70 |
| | | | | H: Int'l offering | 636.32 | 4.7 | | | 2,990.72 |
| | | | | H: Placed to Goldman Sachs | 32.20 | 4.7 | | | 151.34 |
| | | | | H: Placed to 4 local listed companies & a private co. | 290.48 | 4.7 | | | 1,365.24 |
| | | | Aug-97 | ADS: Goldman Sachs | 1.97 | | | 30.66 | 470.40 |
| | | | | H: Goldman Sachs | 45.80 | 4.75 | | | 217.54 |
| 1138 | China Shipping Development Ltd. | HKSE, ADRs | Nov-94 | H: Int'l offering* | 864.00 | 1.46 | | | 1,261.44 |
| | | | | H: Public offering in HK | 216.00 | 1.46 | | | 315.36 |
| 1053 | Chongqing Iron & Steel Company | HKSE | Oct-97 | H: Int'l placing | 278.80 | 1.71 | | | 476.75 |
| | | | | H: Placed to New World Dev. Co. | 61.50 | 1.71 | | | 105.17 |
| | | | | H: Placed to China National Arts & Crafts Import & Export Corp | 20.50 | 1.71 | | | 35.06 |
| | | | Nov-97 | H: Public offering in HK | 49.20 | 1.71 | | | 84.13 |
| | | | | H: Over-allotment exercised | 3.94 | 1.71 | | | 6.74 |
| 1072 | Dongfang Electrical Machinery | HKSE, SSE | Jun-94 | H: Int'l placing | 57.50 | 2.83 | | | 162.73 |
| | | | | H: Public offering in HK | 112.50 | 2.83 | | | 318.38 |
| | | | Oct-95 | A: Public offerings | 60.00 | 4.1 | | | - |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|-----------------------------------|-------------------|--------|---|--------------------------|----------------------|-----|----------|---|
| 38 | First Tractor | HKSE | Jun-97 | H: Placing to various investors H: Public offering in HK H: Over allotment | 255.00 45.00 18.00 | 4.5 4.5 4.5 | | | 1,147.50 202.50 81.00 |
| | | | Jul-97 | H: Over allotment | 17.00 | 4.5 | | | 76.50 |
| 921 | Guangdong Kelon | HKSE | Jul-96 | H: Public offering in HK | 30.20 | 3.67 | | | 110.85 |
| | | | | H: Int'l placing | 171.15 | 3.67 | | | 628.12 |
| 525 | Guangshen Railway Company | HKSE, ADS | May-96 | H: Public offering in HK ADS: Int'l placing ADS: Over-allotment | 217.81 20.54 3.73 | 2.91 | | 19 19 | 633.83 3,043.55 553.23 |
| 874 | Guangzhou Pharmaceutical | HKSE | Oct-97 | H: Public offering in HK H: Int'l placing | 32.98 186.92 | 1.65 1.65 | | | 54.42 308.41 |
| 317 | Guangzhou Shipard Int'l | HKSE, SSE | Aug-93 | H: Public offering in HK H: Placing to Civet Inv. Co. (HK) | 145.00 9.90 | 2.08 2.08 | | | 301.60 20.59 |
| | | | Oct-93 | H: Placing to Vincent Leader A: Offering to employees A: Public offerings | 2.50 28.40 98.08 | 2.08 5.23 5.23 | | | 5.20 - - |
| 1133 | Harbin Power Equipment Company | HKSE, ADS | Dec-94 | H: Placing to ABB Asea Brown Boveri H: Int'l placing* H: Public offering in HK | 21.60 341.40 72.00 | 2.58 2.58 2.58 | | | 55.73 880.81 185.76 |
| | | | Jan-95 | H: Over allotment | 34.15 | 2.58 | | | 88.11 |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|--------------------------------------|-------------------|--------|---|--|--------------------------------------|--------------------|------|--|
| 177 | Jiangsu Expressway | HKSE | Jun-97 | H: Int'l placing H: Placed to New World Infrastructure H: Placed to COSCO (Hong Kong) H: Shanghai Industrial Holdings H: Public offering in HK | 747.88 146.63 146.63 97.76 83.10 | 3.11 3.11 3.11 3.11 3.11 | | | 2,325.91 456.03 456.03 304.02 258.43 |
| 358 | Jianxi Copper Company Ltd. | HKSE, LSE | Jun-97 | H: Int'l placing H: Public offering in HK | 439.75 216.74 | 2.55 2.55 | | | 1,121.35 552.68 |
| 368 | Jilin Chemical Industrial Company | HKSE, SZSE | May-95 | H: Public offering in HK ADS: Offer ADS to US & others Jun-95 ADS: Over-allotment Oct-96 A: Public offerings A: Offering to employees | 89.30 8.04 0.72 30.00 20.00 | 1.589 3.5 3.5 | 20.75 20.75 | | 1,300.83 116.13 - - |
| 350 | Jingwei Textile Machinery | HKSE, SZSE | Feb-96 | H: Public offering in HK H: Int'l placing H: Over allotment Nov-96 A: Public offerings A: Offering to employees | 40.00 120.00 20.80 13.00 10.00 | 1.29 1.29 1.29 4.5 4.5 | | | 51.60 154.80 26.83 - - |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|--|----------------------|--------|---|----------------------|------|------|------|---|
| 300 | Kunming Machine Tool Company | HKSE, SSE | Dec-93 | H: Public offering in HK | 65.00 | 1.98 | | | 128.70 |
| 1108 | Luoyang Glass Company | HKSE, SSE | Jul-94 | A: Public offerings H: Int'l placing | 60.00 | | 4.43 | | - |
| | | | | H: Public offering in HK | 181.50 | 3.65 | | | 662.48 |
| | | | Sep-95 | A: Public offerings | 68.50 | 3.65 | | | 250.03 |
| | | | | A: Issued to employees | 40.00 | | 5.03 | | - |
| | | | | | 10.00 | | 5.03 | | - |
| 323 | Maanshan Iron & Steel Company | HKSE, SSE | Nov-93 | H: Int'l placing | 1,294.30 | 2.27 | | | 2,938.06 |
| | | | | H: Public offering in HK | 438.00 | 2.27 | | | 994.26 |
| | | | Jan-94 | A: Offering to legal person | 87.81 | | 3.45 | | - |
| | | | | A: Offering to employees | 190.00 | | 3.45 | | - |
| | | | | A: Public offerings | 410.00 | | 3.45 | | - |
| 553 | Nanjing Panda Electronics Company | HKSE, SSE | Apr-96 | H: Public offering in HK | 48.40 | 2.13 | | | 103.09 |
| | | | | H: Int'l placing | 193.60 | 2.13 | | | 412.37 |
| | | | Nov-96 | A: Public offerings | 23.00 | | 5.1 | | - |
| 42 | Northeast Electrical Transmission & Transformation Machinery Manufacturing Co. | HKSE, SSE or SZSE | Jul-95 | H: Public offering in HK | 24.80 | 1.8 | | | 44.63 |
| | | | | H: Int'l placing | 233.16 | 1.8 | | | 419.68 |
| | | | Nov-95 | A: Public offerings | 30.00 | | 5.2 | | - |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|------|--------------------------------|----------------|--------|--|-------------------|-------|------|------|--------------------------------------|
| 1122 | Qingling Textile | HKSE | Aug-94 | H: Int'l placing* | 400.00 | 2.07 | | | 828.00 |
| | | | | H: Public offering in HK | 100.00 | 2.07 | | | 207.00 |
| 719 | Shandong Xinhua Pharmaceutical | HKSE, SZSE | Dec-96 | H: Placing to various investors | 109.50 | 1.82 | | | 199.29 |
| | | | | H: Public offering in HK | 35.00 | 1.82 | | | 63.70 |
| | | | Jan-97 | H: Over allotment | 5.50 | 1.82 | | | 10.01 |
| | | | Jul-97 | A: Public offerings | 10.00 | | 3.45 | | - |
| 338 | Shanghai Petrochemical | HKSE, SSE | Jul-93 | H: Public offering in HK | 840.00 | 1.58 | | | 1,327.20 |
| | | | | H: Int'l offering* | 840.00 | 1.58 | | | 1,327.20 |
| | | | Oct-93 | A: Public offerings | 550.00 | | 3 | | - |
| | | | Jun-94 | A: Public offerings | 320.00 | | 2.4 | | - |
| | | | Sep-96 | H: Int'l offering* | 500.00 | 2.075 | | | 1,037.50 |
| | | | Jan-97 | H: Placing | 150.00 | 2.28 | | | 342.00 |
| 548 | Shenzhen Expressway | HKSE | Mar-97 | H: Public offering in HK | 195.00 | 2.2 | | | 429.00 |
| | | | | H: Placing to various investors | 552.00 | 2.2 | | | 1,214.40 |
| 107 | Sichuan Expressway | HKSE | Sep-97 | H: Public offering in HK | 64.21 | 1.88 | | | 120.71 |
| | | | | H: Int'l placing | 577.86 | 1.88 | | | 1,086.38 |
| | | | | H: Placing to New World Infrastructure | 253.25 | 1.88 | | | 476.11 |
| 1065 | Tianjin Bohai | HKSE, SSE | May-94 | H: Public offering in HK | 340.00 | 1.2 | | | 408.00 |
| | | | Jun-95 | A: Public offerings | 68.98 | | 2.5 | | - |

| Code | Company | Listing Places | Date | Share Capital Changes | No. of shares (m) | HK\$ | RMB | US\$ | Capital Raised in Hong Kong (HK\$ m) |
|-------|-------------------------------|--------------------|--------|---|----------------------|------|------|------|---|
| 168 | Tsingtao Brewery Company Ltd. | HKSE, SSE, ADRs | Jul-93 | H: Issued to Anheuser-Busch Int'l Holdings | 45.00 | 2.8 | | | 126.00 |
| | | | | H: Public offering in HK | 272.60 | 2.8 | | | 763.28 |
| | | | Aug-93 | A: Public offerings | 100.00 | | 6.38 | | - |
| 1033 | Yizheng Chemical | HKSE, ADSS, SSE | Mar-94 | H: Placed to Amoco Chemicals | 25.00 | 2.38 | | | 59.50 |
| | | | | H: Placed to ICI China | 25.00 | 2.38 | | | 59.50 |
| | | | | H: Placed to Mitsui & Co. | 5.00 | 2.38 | | | 11.90 |
| | | | | H: Placed to BOC China Fund Ltd. | 10.00 | 2.38 | | | 23.80 |
| | | | | H: Int'l placing | 635.00 | 2.38 | | | 1,511.30 |
| | | | | H: Public offering in HK | 300.00 | 2.38 | | | 714.00 |
| | | | Jan-95 | A: Public offerings | 200.00 | | 2.68 | | - |
| | | | | H: Placing to investors | 400.00 | 2.45 | | | 980.00 |
| 576 | Zhejiang Expressway | HKSE | May-97 | H: Public offering in HK | 486.26 | 2.38 | | | 1,157.31 |
| | | | | H: Int'l placing | 822.91 | 2.38 | | | 1,958.52 |
| | | | | H: Placed to Shanghai Industrial Holdings | 124.68 | 2.38 | | | 296.75 |
| 1128 | Zhenhai Refining | HKSE | Dec-94 | H: Placed to ARCO Asia | 237.60 | 2.38 | | | 565.49 |
| | | | | H: Int'l offering | 271.80 | 2.38 | | | 646.88 |
| | | | | H: Public offering in HK | 90.60 | 2.38 | | | 215.63 |
| Total | | | | | | | | | 6,148.89 |

Source: Wardley Data Services Ltd.

Appendix II – Results of companies selection methodology

| Company | Listing Date | Closing Price of First Trading day Company HS Index (\$) | 6 months | | 1 year | | 6 months performance (Relative value) | | 1 year performance (Relative value) | |
|----------------------------|--------------|--|-----------------------|--------------------|-----------------------|--------------------|---------------------------------------|-------------|-------------------------------------|-------------|
| | | | Company HS Index (\$) | (125 trading days) | Company HS Index (\$) | (250 trading days) | To 1 st trading day | To HS Index | To 1 st trading day | To HS Index |
| 1 GUANGDONG KELON | 7/23/96 | 3.1 | 10865.31 | 6 | 13289.21 | 7.45 | 14858.58 | 1.94 | 1.58 | 2.40 |
| 2 YIZHENG CHM.FIBRE | 3/29/94 | 2.38 | 9480.14 | 3.06 | 9801.43 | 2.65 | 8111.27 | 1.29 | 1.24 | 1.11 |
| 3 TSINGTAO BREWERY | 7/15/93 | 3.6 | 6978.54 | 9.25 | 12167.9 | 5.75 | 8640.31 | 2.57 | 1.47 | 1.60 |
| 4 LUOYANG GLASS | 7/8/94 | 2.92 | 8432.96 | 3 | 8196.02 | 3.9 | 9158.95 | 1.03 | 1.06 | 1.34 |
| 5 DONG FANG ELECT.MCH. | 6/6/94 | 3.17 | 9383.03 | 3.45 | 8658.83 | 3.05 | 9013.32 | 1.09 | 1.18 | 0.96 |
| 6 GUANGSHEN RAILWAY | 5/14/96 | 3.15 | 10817.88 | 2.92 | 12559.4 | 3.63 | 12610.17 | 0.93 | 0.80 | 1.15 |
| 7 TIANJIN BOHAI CHM. | 5/17/94 | 1.1 | 9044.7 | 1.31 | 9434.31 | 0.93 | 8226.04 | 1.19 | 1.14 | 0.85 |
| 8 GUANGZHOU SHIP. | 8/6/93 | 2.4 | 7396.77 | 4.7 | 11470.42 | 2.66 | 9117.66 | 1.96 | 1.26 | 1.11 |
| 9 BEIREN PRINTING | 8/6/93 | 2.75 | 7396.77 | 4.72 | 11470.42 | 3.03 | 9117.66 | 1.72 | 1.11 | 1.10 |
| 10 SHANGHAI PETROCHEM. | 7/26/93 | 1.61 | 6858.08 | 3.05 | 10774.2 | 1.71 | 8432.96 | 1.89 | 1.21 | 1.06 |
| 11 ANHUI EXPRESSWAY CO. | 11/13/96 | 1.58 | 12943.69 | 1.96 | 13579.34 | 0.95 | 9059.89 | 1.24 | 1.18 | 0.60 |
| 12 JINGWEI TEXTILE MACHINE | 2/2/96 | 1.39 | 11469.4 | 0.97 | 10706.97 | 1.43 | 13830.68 | 0.70 | 0.75 | 1.03 |
| 13 SHANDONG XINHUA PHARM. | 12/31/96 | 2.3 | 13451.45 | 3.05 | 15021.23 | 1.44 | 10435.15 | 1.33 | 1.19 | 0.63 |
| 14 JILIN CHEMICAL IND. | 5/23/95 | 1.68 | 9302.86 | 1.52 | 9385.22 | 1.54 | 10697.54 | 0.90 | 0.90 | 0.92 |
| 15 CHINA EASTERN AIRLINES | 2/5/97 | 1.45 | 13660.5 | 2 | 15772.06 | 0.77 | 9433.7 | 1.38 | 1.19 | 0.53 |
| 16 QINGLING MOTORS | 8/17/94 | 2.75 | 9537.98 | 2.02 | 8004.01 | 1.94 | 9385.27 | 0.73 | 0.88 | 0.71 |
| 17 NORTH EAST ELEC. | 6/7/95 | 1.71 | 9376.87 | 1.27 | 9985.23 | 1.36 | 10904.47 | 0.74 | 0.70 | 0.80 |
| 18 NANJING PANDA | 5/2/96 | 2 | 10929.9 | 1.18 | 12492.37 | 1.57 | 12581.31 | 0.59 | 0.52 | 0.79 |

| Company | Listing Date | Closing Price of First Trading day Company HS Index (\$) | 6 months (125 trading days) Company HS Index (\$) | | 1 year (250 trading days) Company HS Index (\$) | | 6 months performance (Relative value) To 1 st trading day Index | | 1 year performance (Relative value) To 1 st trading day Index | |
|---------------------------|--------------|--|---|------|---|------|--|-------|--|-------|
| | | | | | | | To 1 st trading day | Index | To 1 st trading day | Index |
| 19 MAANSHAN IRON & STL. | 11/3/93 | 3.65 | 9352.11 | 2.67 | 9328.64 | 2.4 | 9418.57 | 0.73 | 0.73 | 0.66 |
| 20 ZHENHAI REFN. & CHM. | 12/2/94 | 2.1 | 8221.57 | 2.02 | 9390.6 | 1.35 | 9367.65 | 0.96 | 0.84 | 0.64 |
| 21 KUNMING MACHINE | 12/7/93 | 5.8 | 9736.57 | 3.32 | 9523.63 | 2.85 | 9303.24 | 0.57 | 0.59 | 0.49 |
| 22 CHINA SHIPPING DEV. | 11/11/94 | 1.65 | 9367.85 | 1.52 | 8319.75 | 0.82 | 9774.48 | 0.92 | 1.04 | 0.50 |
| 23 CHENGDU TELECOM.CABLE | 12/13/94 | 2.42 | 7849.75 | 2.5 | 9570.37 | 1.32 | 9523.87 | 1.03 | 0.85 | 0.55 |
| 24 HARBIN POWER EQUIPMENT | 12/16/94 | 2.5 | 8166.39 | 2.55 | 9292.78 | 1.31 | 9813.34 | 1.02 | 0.90 | 0.52 |
| 25 BEIJING YANHUA | 6/25/97 | 1.64 | 15065.02 | 1.66 | 10346.38 | N/A | N/A | 1.01 | 1.47 | N/A |
| 26 BEIJING DATANG POWER | 3/21/97 | 3.02 | 12489.3 | 4.25 | 14308.3 | N/A | N/A | 1.41 | 1.23 | N/A |
| 27 ZHEJIANG EXPRESSWAY CO | 5/15/97 | 2.5 | 14041.9 | 1.62 | 10681.75 | N/A | N/A | 0.65 | 0.85 | N/A |
| 28 JIANGSU EXPRESSWAY | 6/27/97 | 2.75 | 15196.79 | 1.62 | 10754.11 | N/A | N/A | 0.59 | 0.83 | N/A |
| 29 SHENZHEN EXPRESSWAY | 12/03/97 | 2.77 | 13119.13 | 2.05 | 13735.33 | N/A | N/A | 0.74 | 0.71 | N/A |
| 30 ANGANG NEW STEEL | 7/24/97 | 1.7 | 15709.23 | 0.62 | 9226.55 | N/A | N/A | 0.36 | 0.62 | N/A |
| 31 JIANGXI COPPER | 6/12/97 | 2.35 | 13924.34 | 1.02 | 11207.58 | N/A | N/A | 0.43 | 0.54 | N/A |
| 32 BEIJING NORTH STAR CO. | 5/14/97 | 4.67 | 14153.58 | 1.85 | 10780.78 | N/A | N/A | 0.40 | 0.52 | N/A |
| 33 CHINA STHN. AIRL. | 7/31/97 | 4.88 | 16365.71 | 1.36 | 9246.8 | N/A | N/A | 0.28 | 0.49 | N/A |
| 34 FIRST TRACTOR | 6/23/97 | 5.05 | 15021.23 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 35 SICHUAN EXPRESS | 10/7/97 | 1.26 | 14810.76 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 36 CATIC SHENZHEN | 9/29/97 | 3.15 | 14864.37 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

| Company | Listing Date | Closing Price of First Trading day | 6 months | | 1 year | | 6 months performance | | 1 year performance | |
|----------------------------|--------------|------------------------------------|--------------------|------|--------------------|------|--------------------------------|-------------|--------------------------------|-------------|
| | | | (125 trading days) | | (250 trading days) | | (Relative value) | | (Relative value) | |
| | | | Company HS Index | (\$) | Company HS Index | (\$) | To 1 st trading day | To HS Index | To 1 st trading day | To HS Index |
| 37 GUANGZHOU PHARM. | 10/30/97 | 1.34 | 10362.86 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 38 ANHUI CONCH | 10/21/97 | 1.55 | 12403.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 39 CHONG QING IRON & STEEL | 10/17/97 | 1.45 | 13601.01 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Source: Wardley Data Services Ltd.

Appendix III - History of Yizheng Chemical

| Year | Event |
|------|--|
| 1981 | Yizheng Joint Corp of Chemical Fibre Industry ("YJC"), 70% owned by the Ministry of Textile (presently called "Textile Council") and 30% owned by China International Trust & Investment Corporation ("CITIC") was established in December to fund the project to meet the demand of natural fibres for its domestic textile industries. |
| 1982 | Phase II commenced to increase production capacity |
| 1993 | Phase III commenced to expand its chip production capacity and to vertically integrate into producing PTA (a principally raw material for polyester production) & polyester filament. Yizheng was established as a Joint Stock Company on December 31, 1993. |
| 1994 | One billion H-shares were issued in March 1994 and listed on the Stock Exchange of Hong Kong on March 29, 1994. |
| 1995 | Issued 200m new A-shares in January and traded in the Shanghai Stock Exchange on April 11, 1995. Issued 400m new H-shares in April and traded in the Stock Exchange of Hong Kong on April 26, 1995. On August 25, 1995, acquire Foshan Chemical Fibre Joint Corp (5 th largest producer of polyester products in the PRC) and its related companies. |
| 1996 | Obtain approval for its Phase IV expansion proposal, which includes a PTA project, a polyester project, a melt spinning staple fibre project and a polyester filament project. Established subsidiaries in 12 strategically located cities in the PRC to expand its sales network and export facilities. |
| 1997 | (97/6/30) Established new subsidiary in Hong Kong to increase its export. (97/8/21) State Council approved the merger of Yizheng group (Key product: Polyester), Yangzi Petrochemical (Oil refining & midstream products: PTA, PX), Jin ling Petrochemical (Oil refining & oil product) & Nanjing Chemical (inorganic chemicals). The merger would reduce over-expansion of different companies, increase the financing advantage, stabilize the raw materials supply and price, and might reduce over-employment. |
| 1998 | On March 17, 1998, State Council announced to approve amended Phase IV Plan: New production unit: 90,000 tonnes filament annually; New production unit: 90,000 tonnes staple fibre annually; Technological improvement in existing PTA production: from 250,000 to 350,000 tonnes annually and existing 7 polyester production units to 200,000 tonnes annually; Establish local polyester production unit: annual production 100,000 tonnes; New production unit: 450,000 tonnes PTA. This Phase IV expansion plan will be divided into two phases. The first phase including the above item 1-4 will be completed in 2000, and cost RMB 2.95b. The required capital will come from internal cash generation and bank loan. |

Source: Wardley Data Services Ltd.

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